ACADEMIC YEAR 2020-2021

MAGIC CIRCUITS

PE-URRE

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TECH OF THE FUTURE: TECHNOLOGY PREDICTIONS FOR OUR WORLD IN 2050

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INNOVATION TECHNOLOGY TRENDS

The world of technology is constantly evolving and advancing. With each passing year, we witness new inventions, innovations, and breakthroughs that change the way we live and interact with the world around us. It's fascinating to imagine what kind of technological advancements we'll see in the next few decades. Here are some predictions for the tech of the future and what our world will look like in 2050.



Technology Industry Trends



Another area of development is renewable energy. As the world becomes more environmentally conscious, we can expect to see a greater emphasis on clean, sustainable energy sources like solar and wind power.

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Finally, we can expect significant advancements in the field of medicine. By 2050, personalized medicine will become the norm. With the help of Al and genetics, doctors will be able to create customized treatments for each individual patient.



In conclusion, the future of technology is bright and exciting. From AI to renewable energy to personalized medicine, the possibilities are endless. While we can't predict the future with certainty, we can certainly look forward to a world that is more connected, sustainable, and innovative

> CONTENT BY: SHRI BALAJI A V(1SB20EC040)

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- ಕನಾಾಟಕವು (ಪೂರ್ವದಲ್ಲಿ ಮೈಸೂರು ರಾಜ್ಯ) ಭಾರತದಲ್ಲಿ ನ ರಾಜ್ಯ ವೊಂದು. ಕರ್ನವಟಕವು ಭಾರತದ ಐದು ಪ್ರ ಮುಖ ದಕ್ಷಿ ಣಾತಯ ರಾಜ್ಯ ಗಳಲ್ಲಿ ಅತಿದೊಡ್ಡ ರಾಜ್ಯ ವು ಹಾಗೂದೇಶದ ಆರನೆಯದೊಡ್ಡ ರಾಜ್ಯ ವು.
- ಮುನ್ನನ ಡಿ:೧೯೭೩ಕ್ಕೆ ಮೊದಲು ಕರ್ನವಟಕದ ಹೆಸರುಮೈಸೂರು ರಾಜ್ಯ ಎೊಂದಿತ್ತು.ಇದಕ್ಕೆ ಕಾರಣ ಕರ್ನವಟಕ ಏಕ್ಷೀಕರಣದಮೊದಲ ಸೃಷ್ಟಿ ಮೈಸೂರು ಮಹಾಸಂಸ್ಥಾ ನರ್ನ್ನು ಆಧರಿಸಿದುು (೧೯೫೦ ರಲ್ಲಿ). ೧೯೫೬ ರಲ್ಲಿ ಸುತು-ಮುತು ಲ ರಾಜ್ಯ ಗಳ ಕನು ಡ್ ಪ್ರ ಧಾನ ಪ್ರ ದೇಶಗಳನ್ನು ಸೇರಿಸಲಾಯಿತ್ತ. "ಕರ್ನವಟಕ" ಎೊಂಬ ಹೆಸರಿಗೆ ಅನೇಕ ವುಯ ತಪ ತು ಗಳು ಪ್ರ ತಿಪಾದಿಸಲಪ ಟ್ಟಿ ವೆ. ಎಲಿ ಕ್ಷೆ ೊಂತ ಹೆಚ್ಚಾ ಗಿ ಒಪ್ಪ ಲಪ ಟ್ಟಿ ರುರ್ ವುಯ ತಪ ತು ಎೊಂದರೆ ಕರ್ನವಟಕ ಎೊಂಬುದು "ಕರು+ರ್ನಡು" ಎೊಂಬುದರಿೊಂದ ವುಯ ತಪ ತು ಯನ್ನು ಪ್ಡೆದಿದೆ. ಕರುರ್ನಡು ಎೊಂದರೆ ಕಪ್ಪಪ ಮಣ್ಣಿ ನ ರ್ನಡು, "ಎತು ರದ ಪ್ರ ದೇಶ" ಎೊಂದು ಅರ್ವ. ಕರ್ನವಟಕ ರಾಜ್ಯ ದ ಸಮುದರ ಮಟಿ ದಿೊಂದ ಸರಾಸರಿ ಎತು ರ ೧೫೦೦ ಅಡಿ ಇದುು ಇದು ಭಾರತದಲ್ಲಿ ಅತಿ ಹೆಚ್ಚಾ ನ ಸರಾಸರಿ ಎತು ರವುಳಳ ರಾಜ್ಯ ಗಳಲ್ಲಿ ಒೊಂದು.



 ಸಂಸ್ಕ ೃತಿ: ಕರ್ನವಟಕದ ಕ್ಕಲವು ಜ್ನಪ್ರರ ಯ ಸ್ಥೊಂಸೆ ೃತಿಕ ಕಲೆಗಳು: ಸಂಗೀತ: ದಕ್ಷಿ ಣ ಭಾರತದ ಶಾಸಿು ರೀಯ ಸಂಗೀತ ಪ್ದಧ ತಿಯಾದ ಕರ್ನವಟಕ ಸಂಗೀತ ಉಗಮವಾದದುು ಕರ್ನವಟಕದಲ್ಲಿ ಯೇ. ಕರ್ನವಟಕದಲ್ಲಿ ಜ್ನಪ್ರರ ಯವಾಗಿರುರ್ ಇತರ ಸಂಗೀತರೂಪ್ಗಳಲ್ಲಿ ಭಾರ್ಗೀತೆಗಳು, ಸುಗಮ ಸಂಗೀತ, ಚ್ಚತರ ಗೀತೆಗಳು ಸೇರಿವೆ. ನೃತಯ: ಭಾರತದ ಶಾಸಿು ರೀಯನೃತಯ ಪ್ದಧ ತಿಗಳಲ್ಲಿ ಹೆಸರಾದ ಭರತರ್ನಟಯ ಕರ್ನವಟಕದಲ್ಲಿ ಜ್ನಪ್ರರ ಯ. ಕರ್ನವಟಕಕ್ಕೆ ವಿಶಿಷ್ ವಾದ ಚೊಂದು ನೃತಯ ಕಲೆ ಯಕ್ಷಗಾನ.ಡೊಳುಳ ಕುಣ್ಣತ ಜಾನಪ್ದ ನೃತಯ ಪ್ದಧ ತಿಗಳಲ್ಲಿ ಒಳೊಂದು.



ಕೃಷ್ಣಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ: ರಾಜ್ಯ ದ ಉತು ರ ಭಾಗದಲ್ಲಿ ರುರ್ ಕೃಷ್ಣಿ ನದಿಯ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶದಲ್ಲಿ ಪ್ರ ಧಾನ ಉಪ್ನದಿಗಳಾದ ತ್ತೊಂಗಭದ್ರರ, ಮಲಪ್ರ ಭಾ, ಘಟಪ್ರ ಭಾ, ಭೀಮಾನದಿಗಳು ಹರಿಯುತು ವೆ. ಕಾವೇರಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ: ದಕ್ಷಿ ಣದ ಕಾವೇರಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶದಲ್ಲಿ ಪ್ರ ಧಾನ ಉಪ್ನದಿಗಳಾದ ಹಾರಂಗಿ, ಹೇಮಾರ್ತಿ, ಕಬನಿ, ಸುರ್ಣಾವರ್-ತಿ, ಲಕ್ಷಮ ಣ ತೀರ್ವ, ಶಿಕೊಂಶಾ, ಅಕಾವರ್ತಿ ನದಿಗಳು ಹರಿಯುತು ವೆ. ಗೀದ್ರರ್ರಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ:ಗೀದ್ರರ್ರಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶದಲ್ಲಿ ಪ್ರ ಧಾನ ಉಪ್ನದಿಯಾದ ಮಂಜೀರಾ ನದಿ ಹರಿಯುತು ದೆ. ಪ್ರಾ ಮಕ್ಕೆ ಹರಿಯುರ್ ನದಿಗಳ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ: ಈ ಪ್ರ ದೇಶದಲ್ಲಿ ಮಾೊಂಡ್ವಿ, ಕಾಳಿ, ಗಂಗಾರ್ಲ್ಲಿ, ಅಘರ್ನಶಿನಿ, ಶರಾರ್ತಿ, ಚಕಾರ, ವಾರಾಹಿ, ನೇತಾರ ರ್ತಿ, ಬಾರಾಪೀಲ್ ನದಿಗಳು ಹರಿಯುತು ವೆ. ಉತು ರ ಪ್ರರ್ನಕ್ಷನಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ. ದಕ್ಷಿ ಣ ಪ್ರರ್ನಕ್ಷನಿ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ. ಪಾಲಾರ್ ಜ್ಲಾನಯನ ಪ್ರ ದೇಶ.

> CONTENT BY: ABHISHEK.A (1SB20EC001)

The Artistry and Allure of Anime & Manga

We've all undoubtedly encountered these renowned shows: Dragon Ball, Pokémon, Naruto, Doraemon, and Shin Chan. They aren't merely cartoons; they represent the pinnacle of creativity and exceptional artworks know as Anime. Anime has its origins in Japan, dating back to the early 20th century. The term "anime" is a derivative of the English word "animation" and is used to describe animated works characterized by a unique Japanese style. In 1917, Jun'ichi Kōuchi created what is now recognized as one of the first anime, titled "Namakura Gatana" or "An Obtuse Sword." However, it was Osamu Tezuka, often referred to as the "God of Manga," who played a pivotal role in shaping modern anime, particularly with his iconic creation, "Astro Boy," during the 1960s. Since then, anime has undergone significant evolution and has become a globally influential medium, boasting a wide array of genres and artistic styles. Here are some of my favourite beautiful sayings on anime:

- "Anime teaches us to never give up on our goals, to always believe in ourselves, and to cherish our friends."
- "Anime has a way of touching your soul and making you feel deeply connected to the characters and their journeys."
- "Anime is a form of expression that transcends language, culture and time. Anime is a reflection of our own reality, but with a touch of magic, wonder and adventure." Leonardo DiCaprio
- "I love anime because it shows me the beauty of diversity and the power of friendship. Anime teaches me to respect different cultures and perspectives, and to cherish the bonds I have with others." Barack Obama

Certainly, there exists an abundance of beautifully and eloquently expressed quotes within the realm of anime. Anime boasts a vibrant and diverse fan base, uniting individuals from various backgrounds through its captivating narratives and compelling themes. It possesses the power to weave beautiful stories that resonate deeply with our emotions, touching our hearts and leaving a lasting impression. Manga, a Japanese comic or graphic novel, serves as the source material for many beloved anime series. It is essentially a visual storytelling medium that incorporates intricate artwork and dialogue, allowing readers to follow engaging narratives and character development. Creating manga is no easy feat; it requires a deep understanding of storytelling, artistry, and panel layout. The transition from manga to anime involves adapting the source material into animated form, a process that demands careful attention to maintaining the essence of the original story and characters. Many iconic anime, like "Naruto," have their roots in manga, highlighting the enduring influence and popularity of this medium in the world of entertainment. I highly recommend delving into the world of anime and manga. These mediums offer valuable life insights beyond mere entertainment, enriching your journey by expanding your understanding of diverse perspectives and ethical values. My own respect for others has grown, recognizing that each person has a unique viewpoint, thanks to the profound lessons I've learned from anime and manga



CONTENT BY: JEEVITHA.M(1SB20EC022)

VLSI

Very-large-scale integration (VLSI) is the process of creating an integrated circuit (IC) by combining thousands of transistors into a single chip. VLSI began in the 1970s when complex semiconductor and communication technologies were being developed. The microprocessor is a VLSI device. Before the introduction of VLSI technology, most ICs had a limited set of functions they could perform. An electronic circuit might consist of a CPU, ROM, RAM and other glue logic. VLSI lets IC designers add all of these into one chip.

The electronics industry has achieved a phenomenal growth over the last few decades, mainly due to the rapid advances in large scale integration technologies and system design applications. With the advent of very large scale integration (VLSI) designs, the number of applications of integrated circuits (ICs) in highperformance computing, controls, telecommunications, image and video processing, and consumer electronics has been rising at a very fast pace.

The current cutting-edge technologies such as high resolution and low bit-rate video and cellular communications provide the endusers a marvelous amount of applications, processing power and portability. This trend is expected to grow rapidly, with very important implications on VLSI design and systems design.

Applications of VLSI technology:

Consumer **Electronics:** VI SI technology has transformed the consumer electronics industry, enabling the development of smartphones, gaming tablets, consoles, and smartwatches. These devices offer advanced functionalities, high-speed processing, and energy efficiency, enhancing user experiences and productivity.



CONTENT BY: SREENIDHI.R(1SB21EC090)

LIFE BELOW WATER

Oceans and seas cover more than twothirds of the earth's surface and contain 97% of the planet's water. They provide us with an important source of food and other natural resources, including medicines, biofuels and other products. The marine environment is, therefore, an important source of jobs (fishery, tourism, etc.) and coastal areas are great places for living and recreational activities. However, oceans, seas and marine resources are increasingly being degraded by human activities that harm marine life. undermine coastal communities, and negatively affect human health. SDG 14 aims to conserve oceans and ensure their sustainable use by implementing international law and activities to developing safeguard marine and coastal ecosystems, as well prevent and reduce marine as pollution.Oceans provide key natural resources including food, medicines, biofuels, and other products. They help with the breakdown and removal of waste and pollution, and their coastal ecosystems act as buffers to reduce damage from storms.

One of the objectives of SDG14 is to reduce marine pollution by 2025. Plastic is one of the main waste products that end up in the oceans, dumped directly into the sea (e.g. from ships, fishing equipment) or coming from land and sewage water ending into the sea. Each year, an estimated 8 million tonnes of plastic ends up in the ocean. Plastic objects and microplastics have a major environmental and economical impact. Birds, fish, and other sea organisms which ingest them can injure or kill themselves or reduce their reproduction due to toxicit. From microorganisms to the whole food chain is humans, impacted. We have to rethink our plastic dependency if we want to save seas and oceans.



CONTENT BY: RAGHUL.R(1SB21EC079)

The Mystical Power of "Aum": Unveiling Its True Significance through Authentic Proofs

Introduction :

"Aum," often spelled as "Om," is a sacred sound and symbol in various spiritual and religious traditions, particularly in Hinduism and Buddhism. It holds profound significance as a mantra and a symbol of divine energy. While its true essence is often shrouded in mysticism and spirituality, there exist authentic proofs and explanations that shed light on the deeper meaning and significance of "Aum." In this article, we will explore the multifaceted aspects of "Aum" and present true proofs of its significance.

The Sound of Creation:

The "Aum" sound is considered the primordial sound of the universe. symbolizing the creation of the cosmos. This belief is supported by the concept of Nada Brahman in Hinduism, which asserts that the entire universe originated from sound vibrations. Scientifically, we can relate this to the Big Bang Theory, which suggests that the universe began with a massive explosion, emitting energy in the form of sound waves. In this sense, "Aum" represents the cosmic sound that initiated creation, and this connection provides an authentic proof of its significance in Hinduism.

Universal Vibration:

In some spiritual traditions, it is believed that the universe is made up of vibrations and frequencies. "Aum" is considered the primordial sound from which all other sounds and vibrations emanate. It is thought to be the sound that underlies the entire universe's vibrational energy

The Universal Sound:

Beyond Hinduism, "Aum" has also found its place in Buddhism, where it is considered a universal sound that transcends language and culture. In Buddhist practice, chanting "Aum" is believed to help focus the mind, attune it to higher vibrations, and lead to spiritual awakening. The universality of "Aum" as a sound that resonates with practitioners across different spiritual paths serves as another authentic proof of its profound significance.



CONTENT BY: MONIKA.K(1SB21EC056)

℁ SKETCHES OF ECE



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