



Vidya Vikas Education Trust's

Universal College of Engineering

Gujarati Linguistic Minority Institution

CURRENT WAVES

AN INITIATIVE BY EXTC DEPARTMENT

MAGAZINE

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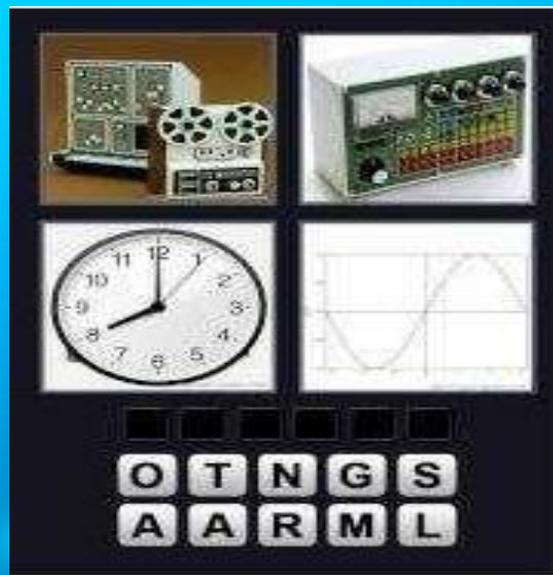
FUN TIME!

Brain teasers!

- There are 50 bikes with a tank that has the capacity to go 100 km. Using these 50 bikes, what is the maximum distance that you can go?
- There are 20 different gulp bait packs of two types, glow and chartreuse, in a tackle box in a completely dark room. What is the minimum number of packs you should grab to ensure you have a matching pair?

Answers 1. 350 km 2. 11

4 PICTURE ONE WORD!!!



ANSWER:- ANALOG

Tips on e-waste management

○ Why Is Electronics Recycling Important?

- Rich Source of Raw Materials Internationally, only 10-15 percent of the gold in e-waste is successfully recovered while the rest is lost. Ironically, electronic waste contains deposits of precious metal estimated to be between 40 and 50 times richer than ores mined from the earth, according to the United Nations.
- Solid Waste Management Because the explosion of growth in the electronics industry, combined with short product life cycle has led to a rapid escalation in the generation of solid waste.
- Toxic Materials Because old electronic devices contain toxic substances such as lead, mercury, cadmium and chromium, proper processing is essential to ensure that these materials are not released into the environment. They may also contain other heavy metals and potentially toxic chemical flame retardants.
- International Movement of Hazardous Waste The uncontrolled movement of e-waste to countries where cheap labor and primitive approaches to recycling have resulted in health risks to residents exposed to the release of toxins continues to an issue of concern.

Electronic quiz

q.1) ONE of the example of active electronic component

a- capacitor

b-transistor

c-transformer

d-inductor

q.2) an ac voltage can be converted into a unidirectional voltage by using

a- multivibrator circuits

b-power amplifier circuits

c- rectifier circuit

d-potential divider circuits

q.3) transistor in common- base mode is one

a- field effect transistor

b-ideal voltage source

c- none of these

d-ideal current source

q.4) an ideal voltage source has

a-very low internal resistance

b-zero internal resistance

c-infinite internal resistance

d-very high internal resistance

WHAT'S NEW

Inventing



TOMORROW'S SKY

The VHF aviation communication system works on the Airband of 118.000 MHz to 136.975 MHz Each channel is spaced from the adjacent ones by 8.33 kHz in Europe, 25 kHz elsewhere. VHF is also used for line of sight communication such as aircraft-to-aircraft and aircraft-to-ATC. Amplitude modulation (AM) is used, and the conversation is performed in simplex mode. Aircraft communication can also take place using HF (especially for trans-oceanic flights) or satellite communication.

Communications connect the flight deck to the ground and the flight deck to the passengers. On-board communications are provided by public-address systems and aircraft intercoms.

New-generation aircraft engines help make air travel safer and more environmentally-friendly: they're quieter, cleaner and use less fuel.

The use of new materials, from advanced metallic alloys to composites, means lighter and stronger parts.

Safran is developing exciting new materials to increase product performance in terms of strength, weight and environmental impact

TOWARDS MORE ELECTRIC AIRCRAFT

At Safran, we're working to foster the development of "more-electric" aircraft, because we are firmly convinced that tomorrow's planes will have to be even more reliable, powerful and economical, while offering greater energy efficiency.

Avionics are the electronic systems used on aircraft, artificial satellites, and spacecraft. Avionic systems include communications, navigation, the display and management of multiple systems, and the hundreds of systems that are fitted to aircraft to perform individual functions. These can be as simple as a searchlight for a police helicopter or as complicated as the tactical

Blood Donation Camp

The IEEE unit, along with the NSS unit, organized a Blood donation camp and Thalassemia minor testing in collaboration with Sarla Blood Bank, Vasai, on 21th February 2019.

The Camp started at 9 am. Many volunteers came forward to donate blood during the camp which included teaching & non-teaching staff, students & non-student donors.



At the end 150 units of blood was collected. About 110 people were screened for Thalassemia minor test.

So far, this academic year had the highest amount of donors in the college history. The blood donation camp was co-ordinated by Mrs Hezal Lopes, IEEE co-ordinator of the college. She was assisted by Mr Deepak Modi, NSS programme co-ordinator.

VYRO 2k19

VYRO 2k19 was organized on 15th February 2019. The event started at 9 am. Overwhelming number of participants came forward to participate during the event which included teaching staff & students from many colleges.

There were about 35 events. Some of the technical events were Web Mania, Debugging, Blind Coding, Obstacle Race, Robo Sumo and ma VYRO 2k19

Winners from our department are:



Mr. Saif & Mr. Dhawal
Robo Obstacle

CONVOCAATION BE EXTC (2014-15) Batch



**Congratulations to Our Dear
Students...!**