



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

CURRENT

WAVES

AN INITIATIVE BY EXTC DEPARTMENT

MAGAZINE

DESIGNED AND EDITED BY:

NEELAM BHOI

DECEMBER 2019



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Electronix quotes



“A good scientist is a person with original ideas. A good engineer is a person who makes a design that works with as few ideas as possible. There are no prima donnas in engineering.”

– Freeman Dyson

“Manufacturing is more than just putting parts together. It’s coming up with ideas, testing principles and perfecting the engineering as well as final assembly.”

– James Dyson

“Architects and engineers are among the most fortunate of men since they build their own monuments with public consent, public approval and often public money.”

– John Prebble



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

STUDENTS INNOVATION



Students of Innovation cell are working on the project Peltier System.

Innovation cell of EXTC department received a sum of Rs. 18000/- from laptop instruments to complete their project on peltier cooling system.

Details about the Project:-

Peltier System is developed using Peltier Modules which are based on thermoelectric effect. When a potential difference is applied on a peltier module a difference in temperature is observed on both the surface on module. A new kind on heating or cooling system can be developed using these peltier modules.

Application

Peltier modules can be used in place of compressor in refrigerator for cooling purposes. This modules are better than environmentally harmful compressor gas used in refrigerator.

Students working on this projects

1. Jatin Gohil
2. Akshay Laddha
3. Ganesh Basyal

The next ongoing project is on drainage valve timer.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

INTERNSHIP - 2019

STUDENTS DOING INTERNSHIP IN NISHAN



About the company

The Company is into the development of Inverters, UPS systems, Static Voltage Stabilizers and Solar Batteries, so basically it is based on **Power Electronics**

They said - Electrical fluctuation is a major cause of sensitive equipment failures in workplace and business facilities today.

They offer advance power conditioning products for protecting modern equipment's in DSP technology and enabled to offer result oriented innovations.

They give electrical power conditioning products and services to protect the modern equipment's and save electrical energy costs month after month.

The specialized products of the company are:

1. IGBT fast transfer switching Static Inverters for commercial and Industrial use.
2. 3 Phase ALBS inverters. (Automatic Lift Backup System).
3. UPS systems for computer system and networks.
4. Powermonk Static Voltage stabilizer for ultra stabilizing utility voltages for sensitive equipments and electrical loads.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

STUDENTS DOING INTERNSHIP IN STELMEC LTD



The specialized products of the company are:

1. Power Products

They are amongst India's leading manufacturers of Low, Medium Voltage Switchgear and other value added Power Products for T&D Networks.

2. EPC

They provide Integrated Design, Engineering, Procurement, Construction and Project Management Solutions for Transmission & Distribution Substations and Lines.

3. Smart grid and power it

They offer Power IT Solutions for maximizing automation in energy infrastructure to achieve Quality Power Supply continuously at Optimum Cost.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Department of Electronics and Telecommunication Engineering

Is Organizing

TWO DAYS WORKSHOP ON DATA SCIENCE with PYTHON & R PROGRAMMING.

Date : 19 & 20 December 2019

About the Workshop

Data Science is a concept of unify statistics, data analysis, machine learning and their related methods in order to understand and analyze actual phenomena with data.

The R language is widely used among statisticians and data miners for developing statistical software and data analysis.

Topics Covered

1. What's python and its scope in Present and Future.
2. Why we need to go for python?
3. Internal Concept and Practical Implementation.
4. Use Python Interpreter and Compiler.
5. Basic Operations and Data Types.
6. Go details in List, Tuple and Dictionary Usage.
7. Code Block and Indentation
8. Conditions and Iteration.
9. Built own function and use built in def.
10. Manage and develop own modules.
11. Manage Exception Handling.
12. File Handling and Operations.
13. Network Program and Socket Implementation.
14. Data Science with R.
15. Image Processing with Python.

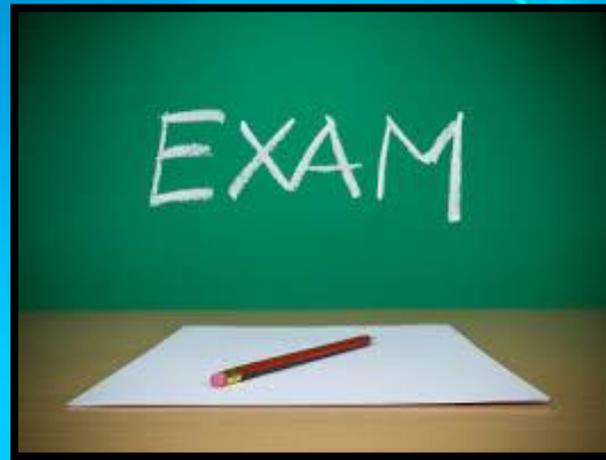


Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Examination



Examination is a test of a person's capacity, knowledge, and ability. It proves what standard of learning a person has acquired during a specific period of time in a specific syllabus. It is the most hated and most shunned things for some students who never like to indulge in it with pleasure until they have a charm of acquiring a degree. Otherwise, they compare it with a nightmare

Education System and Exam

The system of education of mostly examination ridden which aims at the test of achievement and success. The examination is the center of studies and hard work. It is a motivating force to work. Its importance and efficacy have been called in question. The most important point is that examinations are not the real test of knowledge and understanding. They are the test of ignorance or cramming. Still, we can say that examinations are necessary evil which cannot be avoided.

Uses of Examination

1. Difference between genius and dunce

Examinations have many uses. They help us find the most efficient individual among many. we can distinguish between the scholar and the dullard, the genius and the dunce. In this way, they help us discriminate between the genuine gold and the sparkling brass.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

2. Compel to work hard

Secondly, the examinations compel us to work hard. The careless students become serious near the examinations. They buy books they had no intention to buy and gird up their loins. It is a fact that many students read for the sake of examinations. Thus, examinations are a very effective way of goading students to read.

3. Fitness for promotion to a higher grade/classes

Thirdly, examinations are proof and guarantee of man's efficiency. They provide us a proof of the fitness of the student for promotion to a higher grade/class. An employer can safely entrust a job to the degree holder. Without a degree, no one will higher his services. The factories, industries or mills cannot allow the person to perform a technical task without a specific degree/course.

4. Way to attain degrees / diplomas

Similarly, we do not ask everyone to prescribe medicine for us. Only the person holding a degree enjoys the right to operate upon our body. Hence, if we abolish examinations, we shall have to abolish degrees or diplomas.

5. Abuses of examinations

Examinations have certain abuses as well. Many students consider it a curse. They consider them to be a game of chance. The students are never sure of their success. There are always doubts in their minds. Success does not depend upon preparation. Even a student with selected studies may pass and the student with thorough preparation may fail.

6. Uncertainty of success

Some students keep studying the whole session but fail. On the other hand, many others who buy help books and cheap notes near the examinations and cram a few questions, pass. Such examinations are a curse for the shining students.

7. Test of memory

The examinations are a test of nerves. All examinations have a limit of time and place. A student is tested at a bad place and in a bad manner. The question arises how a student's hard work and worth for a semester or full one year is judged in a short time. They are never a foolproof test of one's ability. They are the test of one's memory and writing/typing speed.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

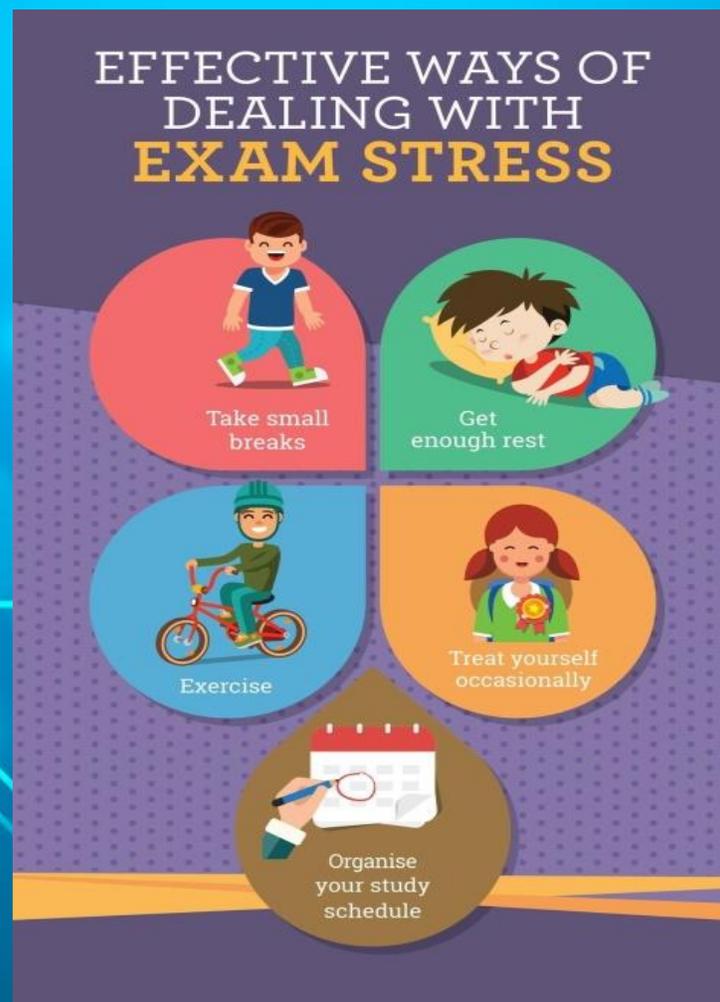
8. Use of unfair means

Some students try to use unfair means to pass out the examinations. The innocent, hardworking and intelligent remain in the background

9. Final words

But in spite of all this, we cannot say that there should be no examinations. There must be some proper way of judging the real worth of the students. So proper changes are required to avoid the abuses and increase the usefulness of the examinations. The assessment criteria of the examinations must be improved in such a way that all the students can show their abilities and can pass them without any fear.

Exam stress tips for students





Vidya Vikas Education Trust's

Universal College of Engineering

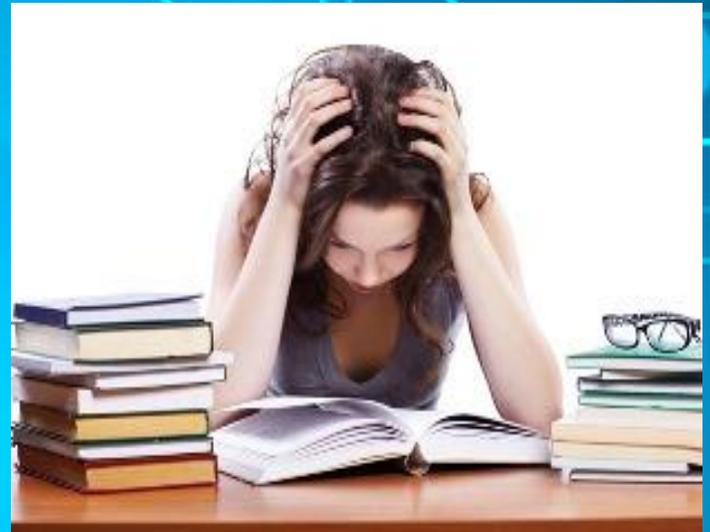
Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Exam stress tips #1: exam stress is totally normal

Feeling a degree of stress and nerves about exams is a completely normal reaction. Exams are an important step in your life and you want to do your best. But keep in mind that you are not alone or 'flaky' or 'weak' for feeling this way.

Every person has a different tolerance for stress and a different way of responding to it. For some it can be – in manageable doses – a help to maintain focus and encourage them to study. Other people struggle to manage it effectively.

The key is to put your exams in perspective. They are one step in your life journey and your future is unlikely to be 'wrecked' by not doing as well as you might have hoped. Many people find other routes to their chosen career despite disappointing exam results. The process might take a little longer or be a bit harder but you can still get there. Do your best and see what happens.



Exam stress tips #2: talk about how you are feeling

Preparing for exams can make you feel like it is 'you versus the world'. It might seem like you have no support and long hours studying can leave you feeling isolated and under pressure. Talking about how you are coping with exam preparation is really beneficial.

Your friends are going through the same experience. Instead of bottling up your emotions or feeling like you just need to get through it, share how you are feeling with a trusted friend. Remember that your parents and older siblings have been there before and came out the other side. You might be surprised how helpful and reassuring talking to them can be on issues like exam prep, coping with nerves and dealing with results (good or bad).



Vidya Vikas Education Trust's

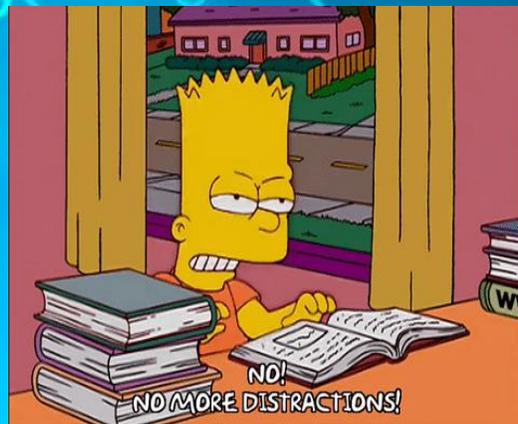
Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Exam stress tips #3: take care of yourself

Stressing over exams can often lead us into negative behaviour, like cramming in as much revision as possible. Students can end up filling every waking hour (and a few when they should be sleeping) with past papers and course revision. None of that is healthy and can actually be counter-productive.

Performing well in your exams requires revision and preparation. But it also needs you to be in top form physically and mentally. That entails looking after your own wellbeing by sleeping well, eating healthily (not litres of Red Bull!) and exercising. Passing an exam is as much about how you slept, ate and exercised as how many hours revision you managed.



Exam stress tips #4: it does not have to be revision 24/7

It is important to strike a balance between revision and having some fun. As a part of looking after yourself set time aside to do something you really enjoy and to chill out.

It will be tempting to forget about studying however! As a result it is important to be disciplined enough to limit that time. Put together a study schedule that includes an hour of revision followed by a 20 minute break watching your favorite TV comedy or listening to relaxing music. Feeling refreshed, you can then return to your studying and smash a few more hours of revision.

At the end of a good day of study, organize something fun to do as a reward for your efforts. Catch up with a friend or go to the gym as a little 'well done' to yourself for another day of exam prep.



Vidya Vikas Education Trust's

Universal College of Engineering

Approved by AICTE, DTE, Maharashtra State Government and Affiliated to Mumbai University
Accredited with B+ Grade by NAAC | Recognised as Linguistic (Gujarati) Minority Institution

Brain teaser

1. How many zeros?

Brain teaser: How many trailing zeros are in the number 5! (5 factorial)?

2. Wasting water

Brain teaser: If you had an infinite supply of water and a 5-liter and 3-liter bucket, how would you measure exactly 4 liters? The buckets do not have any intermediate scales.

Answers

1. Answer: 1 trailing zero

Workings: The factorial of 5 is 120. ($5 \times 4 \times 3 \times 2 \times 1$)

Apparently a favourite during an interview for a systems engineer at Google. This is a prime example of a brain teaser geared towards thinking the right way rather than getting it absolutely correct. If you were to calculate it in your mind through brute force, the interviewer would know that. Google suggests it might be easier to think of how many times a ten would be produced doing the sum, rather than the actual correct answer. Apparently, this would be more impressive. Yeah we know, I thought brain teasers were supposed to be fun.

2. Answer: A lot of wasted water

Workings: You may already know the answer or have worked it out, but we are obliged to give you an answer. Fill the 5-liter bucket first. Then using that bucket fill the 3-liter bucket being careful not to spill any. This leaves 2 litres in the 5-liter bucket. Now chuck away the water in the 3-liter bucket and refill with the remaining contents of the bigger bucket. Once again fill the 5-liter bucket and fill the second 3-liter bucket. This will leave you 4 litres in the 5-liter bucket. Simple!



Vidya Vikas Education Trust's

Universal College of Engineering

Kaman Bhiwandi Road, Survey No. 146 (Part), Village Kaman, Taluka Vasai,
District Palghar-401212, Ph-+91 8007000755 [Email-info.ucoe@universal.edu.in](mailto:info@universal.edu.in)
website- www.ucoe.edu.in / www.universalcollegeofengineering.edu.in