COMPUCOM Group of Colleges

Approved by AICTE, Govt. of India & Affiliated to RTU, Kota & University of Rajasthan, Jaipur

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A dictum of Holistic Growth • NEWSLETTER • Issue - III • October 2022

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Mr. S. K. Surana
Chairman

Mr. Vaibhav Surana
Vice Chairman

PATRONS

Prof. (Dr.) M.R. Farooqi
Principal

Prof. Pawan Agarwal
Registrar

Honoured with Shiksha Bhushan Samman

An enormously proud moment for whole Compucom family!!

Our Honourable Chairman Mr. S. K. Surana has been awarded with Shiksha Bhushan Samman for the commendable contribution in achieving Academic Excellence. Honorable Mr. B. D. Kalla, Education Minister, Rajasthan and Honourable Mr. Subhash Garg, Technical Education Minister presented the prestigious award in 26th Bhamashah Samman Samaroh. Mr. Surana divulged in his illuminative speech that he has been supportive and compassionate for the upliftment of students and promotes quality education in the state. Satellite education has been provided to the students free of cost for equipping the youth with technical skills and for better employment prospects. The vision and mission of Compucom foundation has been to provide computers in schools and technical knowledge so that women and lower strata can be elevated in rural areas. We all, members of Compucom family congratulate Honourable Chairman, Mr. S. K. Surana Sir on this outstanding achievement and feel motivated to work better under the stewardship.

Glimpses

- Achievements
- Events & Activities
- Conferences and FDPs
- Publications
- Innovative Strokes

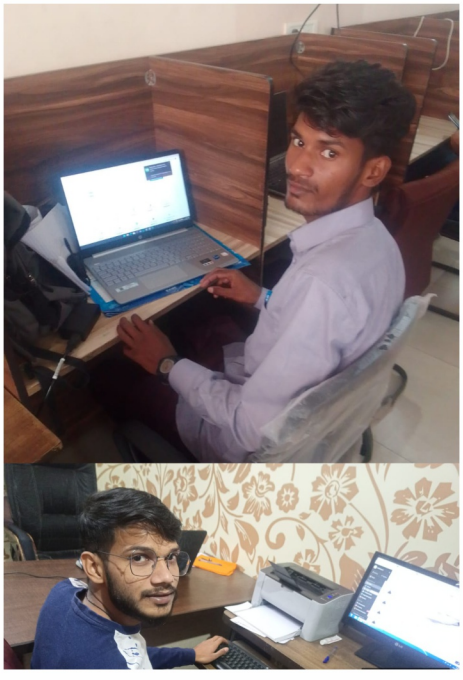


Pre Diwali Celebration

Diwali is a festival of celebrating virtuousness and discarding evil. Therefore, in the valued presence of Honourable Chairman Mr. S. K. Surana and Registrar, Prof. Pawan Agarwal, Compucom family had a small get together before Diwali to celebrate the achievements of the institution. In the continuation, strenuous efforts of industrious and dedicated faculties were acknowledged and appreciated wholeheartedly.

Placement Activities

We are proud to announce about the placements of DDUGKY Courses, JSD and CRM students under the banner of Compucom Foundation. More than 22 companies came at campus including CY Future, Ecuzen Software Ltd., G.V.K., PANTALOONS, TCIL, Bodhisatva Artificial Intelligence Pvt. Ltd., ENLIST, PHOENIX, SAMBHAV, NIGAM, WEGLOBE, DONKHORIAS etc. 98 students received 294 offer letters from various companies. Congratulations to the students for good career ahead!



Achievements

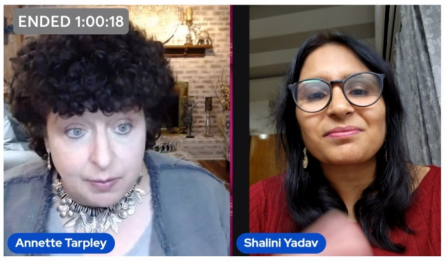
Felicitation @ UEM

Congratulations to Prof. (Dr) Shalini Yadav for being felicitated by University of Engineering and Management, Jaipur at International Conference on 'Advances in English Language Studies' (ICAELS- 2022) organized by UEM, Jaipur where she played a vital role as a member of organizing committee and chaired a session.

NPTEL Online Certification Course

Congratulations! Dr Sheetal Agarwal has successfully completed an elite NPTEL Online Certification course (12 weeks course) on 'Air Pollution and Control' conducted by Indian Institute of Technology, Roorkee and Swayam with highest grades in the course.

Guest @ Live Chat Show, USA



A proud moment! Dr Shalini Yadav as a poet and ambassador of peace was invited in the POP Chat Show hosted by Annette Tarpley, Founder, Passion of Poetry, POP, USA. In the live chat show, Dr. Yadav shared her views as a poet and writer how poetry can impart human values, heal the mental illness and contribute to ensure harmonious and peaceful aura between countries at global level.

Conferences and Workshops

- Dr Arun Kumar Varshney participated in the NPTEL Workshop conducted by Indian Institute of Technology, Madras and Swayam at SKIT, Jaipur.
- Mr. Sandeep Kumar Bairwa participated in the NPTEL Workshop conducted by Indian Institute of Technology, Madras and Swayam at SKIT, Jaipur.
- Dr. Shalini Yadav presented a paper in International Conference on 'Advances in English Language Studies' (ICAELS- 2022) organized by UEM, Jaipur.

Publications

- Dr Anamika Ahirwar, Professor, CITM got published her poem titled 'Maa' in an anthology entitled Love You Maa.
- Dr Shalini Yadav's one English poem got translated in Chinese and published in a Chinese newspaper titled Shan xi Science and Technology (CN-14009), China.

Importance of Technology for Engineering Students

Day-by-day, our technology is gaining importance with fast pace, not only in students' lives but it is also important for all. So we are going to understand how it's so important.

In your day-to-day life, can you imagine or see a pen working without ink or a car is running on highway without petrol? Of course not, all these things are not possible, like this technology is important for engineering students to understand and implement, without equipping with technical skills, an engineering student is only a blank piece of paper.

Technology helps engineering students to work smartly, in less time; moreover, with help of technology, we create our ideas in visual form and express our creativity to others. As we all know that engineering students' mind always find logics and creativity in all ways at all time, it helps them more and equips with skill set.

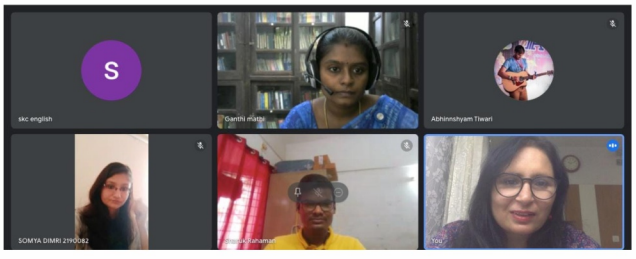
A normal person sees a cycle as traveling vehicle but an engineering student sees the same cycle as a programme. First of all, he sees the manufacturing design of the cycle and then sees all the parts of cycle how it is made.

In other words, we see a video only for improvement but how to create new ideas and express thoughts in own way is possible with help of technology easily. Engineering students implement this in their lives effortlessly. If you are an engineering student then this is the great opportunity for creation and innovation and creating new products with better features. Thus, without knowledge of technology, engineering students are valueless.

Abrar Ahmad
(B.Tech I Year)

Session Chair at National Conference

Dr Shalini Yadav chaired a session in a Two Day National Conference on "Postmodern Voices & Transdisciplinarity in English Language and Literature" organized by The Department of English, Sri Kaliswari College, Sivakasi in collaboration with iSPELL, Indigenous Society for the Promotion of English Language and Literature in Hybrid Mode on 19 and 20 October 2022.



Artificial Intelligence

AI, which stands for artificial intelligence, refers to systems or machines that mimic human intelligence to perform tasks and can improve themselves based on the information they collect.

AI is much more about the process and the capability for super powered thinking and data analysis than it is about any particular format or function. Although AI brings up images of high-functioning, human-like robots taking over the world, AI isn't intended to replace humans. It's intended to significantly enhance human capabilities and contributions. That makes it a very valuable business asset.

Many AI applications are being used within the framework of the education system to help students get educated through online courses and online exams and to help many schools and colleges acquire the right students around the world.

And in the future, more opportunities for development and courses will be available online, with AI-powered courses enabling students to learn from anywhere in the world and explore their skills remotely.

Ayush Sharma
(BCA I Year)

Tania Das
(BCA I Year)

A Perspective Study on Synthesis and Biological Evaluation of Heterocycles Containing Benzo 1, 3 – Thiazoles as Potential Anti Microbial Agents

"Chemistry must serve the protection of health instead of procuring gold".

Drugs and medicines are chemicals that help prevent disease or restore health to people, who are sick. As such, they show an integral role in modern medication. Chemistry in medicine or medicinal chemistry is one of the scientific disciplines that provide these drugs or medicines via design or discovery. In the past era, conventional drugs and medicines were discovered mainly by alteration of natural and pure substances or by synthesis of chemicals. Recently, as our understanding of the pathophysiology of disease has grown new changes have deliberately occurred in the purposeful synthesis, evaluation, and design of drug candidates. Chemistry in Pharmaceuticals is learning about mechanistic and molecular aspects of pharmaceutics. The regulation emphasized on development & design of drug chemistry, drug transport, & action, delivery of drugs, as well as targeting. Further development of new drugs relies heavily on understanding the mechanism and biological processes of drug action at the molecular level. Development in this field currently relies on the design and synthesis of new molecules utilizing tools like combinational chemistry, structure-activity relationship, and computational drug design. Recently, rational drug design changed to precise selected sites is fetching genuineness because of simultaneous advances in biology and chemistry, which includes the classification of human genome. Pharmacists remain to lead in synthesis, drug designing, advancement, and testing. Genetic Engineering with Molecular biology has generated a plethora of possible latest targets for designing drugs and has elucidated the mechanism & structure of conventional targets but moving ahead in computation & computational design has made chemists take complete benefit of this newfound knowledge and understanding. The initial success tries to develop drugs that act on a specific target in the 1970s around the same time as the discovery of the selective H2 antagonist cimetidine and the angiotens transforming enzyme inhibitor captopril. Subsequently, the technique about rational drug design is exploding; using advanced computational and structural methods to support this effort. A survey on Literature discloses that when one live biological heterocyclic framework is joined to one or more, there will be an enhancement in the biological action of the subsequent particle. Considering reality, bihetrocyclic compounds containing pyrazoles were synthesized in the current study. Thiazolidinone, azitidinone, and thidiazole is linked to benzothiazole. The importance of these systems is discussed in the proceeding pages.

Benzothiazole

It is a bicyclic heterocyclic system that contains a ring of benzene fused with the thiazole ring. This colorless liquid has a boiling point of 227 °C and is slenderly water soluble. Benzothiazole is an aroma constituent of coconuts, cocoa beans, and walnuts. Derivatives of Benzothiazole have caught the continuous interest of researchers over the years due to their biological activities. In medicinal chemistry & bioorganic, derivatives of 2-aminobenzothiazole are widely used in drug discovery & development applications to treat bacterial infections, and viral. epilepsy, ulcer, diabetes, analgesia, inflammation, tuberculosis, etc. A novel series of benzothiazole analogous linked to another biologically active heterocycles such as pyrazole (R1 - R15), thiazolidinone (IXA - IXJ), azetidinones (XA - XJ), and thiadiazole (P1-P7 and B1 - B15) were successfully synthesized and characterized by their physicochemical and spectral data. The novel synthesized compounds were represented in four different schemes. Further, fifty-seven synthesized compounds were evaluated for their antibacterial and antifungal activities by the cup plate method. Amongst them, the compounds R13, R14, IXB, IXC, IXI, XB, P1, and P4, have shown good activity against Staphylococcus aureus, Streptococcus aureus (Gram +ve), and compounds R2, R15, XJ, P2, P5, P7, and B2 have exhibited good activity against Escherichia coli, Pseudomonas aeruginosa (Gram -ve) bacteria. The compounds R6, R11, IXB, IXE, IXH, XB, XH, XJ, P3, P5, B1, B8, and B14 have shown good antifungal activity against Candida albicans and Aspergillus fumigates as compared to standard at a concentration of 200 µg/ml. The above study revealed that 15 derivatives have exhibited good antibacterial activity and 13 derivatives have shown good antifungal activity, in which the thiadiazole series proved to be potent antibacterial and antifungal agents. All the synthesized compounds were subjected to anthelmintic activity against Perituma Posthuma earthworms. From the result, it was concluded that the compounds R2, R3, IXG, XG, P1, B2, and B15 exhibited promising anthelmintic activity. Finally, the benzothiazole linked, pyrazole, thiazolidinone, azetidin, and thiadiazole were screened for their in-vitro anti-inflammatory activity in which the albumin denaturation method had been adopted. The compounds R9, R12,IXJ, B7, B8, B11, and B12 have shown good anti-inflammatory activity compared to standard.

Ms. Reena Sharma
Assistant Professor,
Department of Chemistry

Human Behaviour Patterns

Human behaviour is the collection of behaviours exhibited by human beings and influenced by culture, attitudes, emotions, values, ethics, authority, rapport, hypnosis, persuasion, coercion and/or genetics. The behaviour of people (and other organisms or even mechanisms) falls within a range with some behaviour being common, some unusual, some acceptable, and some outside acceptable limits. In sociology, behaviour is considered as having no meaning, being not directed at other people and thus is the most basic human action. Behaviour should not be mistaken with social behaviour, which is more advanced action, as social behaviour is behaviours pecifically directed at other people. The acceptability of behaviour is evaluated relative to social norms and regulated by various means of social control. Humans are biological creatures, as much as crocodiles, cougars, and capabara. We are the product of millions of years of evolution, our physical make-up changing to make us fitter/to survive and reproduce. However, although humans are animals, we also have something that no other animal has the most complex social structure on Earth. We gather in families, tribes, clans, nations. We have an incredibly sophisticated method of interacting-speech. We can communicate over time and distance through printing and broadcasting. Our memories are the longest, our interactions the most intricate, and our perception of the world simultaneously the broadest and most detailed. The combination of biology and society is what makes us what we are and do what we do. Biology guides our responses to stimuli, based on thousands of generations of ancestors surviving because of their responses. Our social structures dictate restrictions on and alterations in how we carry out our biological responses. Neither biology nor society stands without the other. For some people, this is a contradiction-either nature (biology) controls people, or nurture (society) does. But infact we filter everything through both to determine how we react to stimuli. The following is a discussion of the two sides of human nature: first, the biological basis of our responses to the world around us, and second, the social factors that affect those responses and make us human.

Biological Basis of Human Behaviour

The three main elements biology contributes to human behaviour are:

- Self-preservation
- The reason for self-preservation, reproduction; and
- A method to enhance self-preservation and reproduction, greed.

Emotions

An emotion is a mental and physiological state associated with a wide variety of feelings, thoughts, and behaviour. Emotions are subjective experiences, or experienced from an individual point of view. Emotion is often associated with mood, temperament, personality, and disposition. The English word 'emotion' is derived from the French word emouvoir. This is based on the Latin emovere, where e- (variant of ex-) means 'out' and movere means 'move'. The related term "motivation" is also derived from movere. No definitive taxonomy of emotions exists, though numerous taxonomies have been proposed. Some categorizations include: 'Cognitive' versus 'non-cognitive' emotions Instinctual emotions (from the amygdala), versus cognitive emotions (from the prefrontal cortex). Basic versus complex: where base emotions lead to more complex ones. Categorization based on duration: Some emotions occur over a period of seconds (e.g. surprise) where others can last years (e.g. love). A related distinction is between the emotion and the results of the emotion, principal lybehaviours and emotional expressions. People often behave in certain ways as a direct result of their emotional state, such as crying, fighting or fleeing. Yet again, if one can have the emotion without the corresponding behaviour then we may consider the behaviour not to be essential to the emotion. The James-Lange theory posits that emotional experience is largely due to the experience of bodily changes. The functionalist approach to emotions holds that emotions have evolved for a particular function, such as to keep the subject safe.

Sociology of Emotions

We try to regulate our emotions to fit in with the norms of the situation, based on many sometimes conflicting demands upon us which originate from various entities studied by sociology on a micro level such as social roles and I feeling rules' the everyday social interactions and situations are shaped by and, on a macro level, by social institutions, discourses, ideologies etc. For example, (post-)modern marriage is, on one hand, based on the emotion of love and on the other hand the very emotion is to be worked on and regulated by it. The sociology of emotions also focuses on general attitude changes in a population. Emotional appeals are commonly found in advertising, health campaigns and political messages. Recent examples include no-smoking health campaigns and political campaign advertising emphasizing the fear of terrorism.

Motivations

Motivation is the set of reasons that determines one to engage in a particular behaviour. The term is generally used for human motivation but, theoretically, it can be used to describe the causes for animal behaviour as well. This article refers to human motivation. According to various theories, motivation may be rooted in the basic need to minimize physical pain and maximize pleasure, or it may include specific needs such as eating and resting, or a desired object, hobby, goal, state of being, ideal, or it may be attributed to less apparent reasons such as altruism, morality, or avoiding mortality.

Ms. Sweta Agrawal
Assistant Professor
Dept. of Mathematics

Traditional and Modern Teaching

Teaching and learning is something which develops creativity, imagination, emotions, ethics and empathy in a teacher and student.

Traditional teaching: Learning process was overall encircled with the syllabus, teachers, books, lectures, classroom, tests and exams. Teachers and parents were tangled with the rigid concept of producing toppers. They had a stiff mindset of scoring 90% and above was treated as equal to success and achievement in life.

But Why? Why is being successful more important than to be happy? Why to always score 90%, not 40 or 50%? Modern way of facilitation is answer of all these whys.

It is a new concept that is prevailing among learners to think beyond syllabus and books.

Modern way of teaching-learning is shaping the students without forcing them to score high by adapting the same boring patterns. It gives a child freedom for exploring, developing skill of inquiring, improving creativity and imagination, and strengthening their unique human skills.

Old version of the learning process was transforming students into machines and somewhere it worked as well. But now the time has changed and the old version needs to be updated.

We are passing through a phase of change due to digitization. Today we are all equipped with technology, machines and artificial intelligence which can compete with top human specialists though created by human only.

So, why to make this beautiful planet a hub of machines without emotions, empathy and happiness? We must emphasize on holistic development of a child developing desired thinking, reflective learning and imaginative thinking which ultimately lead them to get success and joyful life.

Prakhar Sharma
(BCA I Year)

Priyanshu Bhartwal
(BCA I Year)

Online Fraud

Nowadays many times, Internet is used in wrong ways to earn money. Whenever money is fraudulently withdrawn from your bank account or it is withdrawn wrongly, it is called online fraud.

Always remember one thing that a cheater can cheat you only when he is public about you and has complete information about you. If you are careful then you can never be trapped in online fraud. If the user is alert and follows some rules, then he can easily avoid online fraud. By following these rules, user increases his own security and also avoids the losses that may occur. Some important points to avoid online fraud:

- We should always keep our password strong. If the password is weak then anyone can hack password and play with your data.
- Don't share to OTP anyone.
- Secure online transaction.
- Avoid fraud call.
- Do not click on unknown links etc.

Pradeep Kushwaha
(BCA I Year)

Computer Technology

The use of computer technology has drastically changed the way we live. We rely on computers for everything from entertainment and social networking to online banking and shopping. The Internet has become a vital part of our lives, both at home and at work.

The history of computing is interesting, with the first computers being created in the early 1800s. However, it was not until the mid-20th century that computers began to be used in homes and businesses. In the past few decades, computer technology has evolved rapidly, with ever-more powerful and compact devices being released.

The future of computing looks even more exciting, with the development of artificial intelligence, quantum computing, and other cutting-edge technologies. We can only imagine the ways in which computer technology will continue to transform our lives in the years to come.

The best cure for computer technology is to keep up with the latest trends and to be familiar with the most popular software and hardware. Additionally, it is important to have a good understanding of how computer systems work in order to troubleshoot problems and to optimize performance.

Mayank Sharma
(BCA I Year)

Workshop on Online B.Sc Degree

From Compucom institute as representatives, Dr Arun Kumar Varshney and Mr. Sandeep Kumar Bairwa participated in the collaborative one-day workshop organized by Indian Institute of Technology, Madras and SKIT, Jaipur for exploration and acquaintance of new teaching-learning strategies,. In the workshop, academicians and scholars of many esteemed universities and colleges whole over India took part and enriched their prior knowledge. Congratulations & Keep it up!

Vedic Mathematics: Sutras and Benefits

Introduction

Vedic maths is a system of mathematics that was discovered by an Indian mathematician, Jagadguru Shri Bharathi Krishna Tirthaji during A.D. 1911 and 1918. He printed his findings in a Vedic Mathematics book – Tirthaji Maharaj. Vedic mathematics is also called mental mathematics in the mathematical world. We can say that the brain's capacity and its speed of calculations increases fivefold with the practice of Vedic maths.

Vedic Mathematics

Vedic Maths or Vedic Mathematics is a collection of Methods or Sutras to solve numerical computations quickly and faster. It consists of 16 Sutras called Formulae and 13 sub-sutras called Sub Formulae, which can be applied to the solving of problems in arithmetic, algebra, geometry, calculus, conics, etc. All the sutras and sub sutras of Vedic maths help to perform mathematical operations quickly and accurately.

Vedic Maths Tricks

Vedic maths has many tricks to perform different mathematical operations such as addition, subtraction, multiplication, division, squares, square roots, etc. All these tricks help to compute the numerical problems in very little time when compared to the normal maths procedures. Vedic maths tricks reduce the time in finishing the calculations and create interest in learning more such tricks. Let's have a look at some of the tricks along with examples for a better understanding here.

Vedic Mathematics Benefits

The importance of Vedic Maths can be explained in various ways. The application of Vedic maths in the simplification of numerical problems is many times faster than the modern methods of calculations. Sometimes, this way of simplifying numerical calculations does not require paper and pen also. Thus, learning Vedic maths saves time and improves the interest in learning more applications of maths. Some of the benefits of Vedic mathematics sutras are listed below:

- Calculations become easy and short.
- Simplifications can be done in less time.
- Students undergo less mental stress.
- Results obtained by sutra-based methods can be easily verified with normal procedures.
- The possibility of committing errors by students using these sutras is negligible.
- The use of sutras helps students to improve their knowledge and interest in the subject of mathematics.
- Vedic maths helps to solve hard problems using mental calculations.

Vedic Mathematics Addition Tricks

We have various tricks to perform the addition in Vedic maths. In this section, you will learn how to add numbers using one of the sutras called Ekadhikena Purvena with the help of an example.

Example:

Compute: 98765 + 63217 + 89522 + 60543

Or

By Sutra Ekadhikena Purvena, add 98765, 63217, 89522, and 60543.

Solution:

Steps for adding numbers using Ekadhiken Purvena Sutra:

Step 1: Write the given numbers in rows and columns by giving some space between the digits.

Step 2: Column I (from the right side), add the first two digits, 5 + 7 = 12

Step 3: Mark Ekadhikadot (.) on 1, (digit which is next to 7 in column II)

Step 4: Now, start again adding with 2; 2 + 2 = 4

Again start with 4 such that 4 + 3 = 7

Step 5: Write 7 below at the answer's place

Step 6: Add the remaining columns in the same way.

Thus, the final answer will be obtained.

Vedic Mathematics Subtraction Tricks

Subtraction can be performed using 4 or 5 different methods in Vedic mathematics, and the best, as well as easiest way to subtract the numbers, is the Sutra Ekadhiken Purvena and Param Mitra Unka (the best friend). Here, two digits are called each other's best friends if their sum is equal to 10. For example, 3 is the best friend of 7 since 3 + 7 = 10.

Go through the example given below to understand the subtraction of numbers by Sutra Ekadhiken Purvena.

Question: Subtract 389 from 746.

Solution: Steps for subtraction in Sutra Ekadhiken Purvena:

Step 1: Write the given numbers in rows and columns by giving some space between the digits.

Step 2: Consider column I (from the right end), 9 is greater than 6 so we cannot subtract it from 6.

1 is the best friend of 9 and add 1 to 6, i.e. 1 + 6 = 7. So write 7 in the answer place and mark Ekadhikadot (.) on 8, which is in the same row of column II such that it becomes 9 (as 8 + 1 = 9).

Here, dot (.) on the number represents one more than the previous number.

Step 3: Similarly, we need to subtract the remaining numbers. Thus, the answer will be:

Therefore, 746 – 789 = 357.

Vedic Maths Multiplication Tricks

Like addition and subtraction, multiplication can also be done using different sutras in Vedic maths. In this section, you will learn two simple methods of multiplying numbers along with examples.

Method 1:

In this method, we can multiply the numbers whose unit digits are added up to 10 or powers of 10.

Let's have a look at the solved example given below to understand the multiplication of numbers.

Example: Multiply 63 and 67.

Solution: 63 × 67

Sum of unit digits = 3 + 7 = 10

Digits in tens places = 6

Contd .....

Vedic Mathematics Sutras:

The list of Sutras (16) and Sub sutras (13) are as below:

Sutras 1. एकाधिकेन पूर्वेण (Ekadhiken Purvena)
Sutras 2. निखिलं नवतश्चरमं दशतः (Nikhilam Navatacharamam Dasatah)
Sutras 3. ऊर्ध्वतिर्यग्भ्याम् (Urdhva-tiryagbhyam)
Sutras 4. परावर्त्य योजयेत् (Paravartya Yojayet)
Sutras 5. शून्यं साम्यसमुच्चये (Sunyma Samyasamuchaye)
Sutras 6. (अनुरूप्ये) सुन्यमान्यात {(Anurupye) Sunyamanyat}
Sutras 7. संकलनव्यवकलनाभ्याम् (Sankalana-vyavakalamnabyam)
Sutras 8. पूरणापूरणाभ्याम् (Puranapuranabhyam)
Sutras 9. चलनकलनाभ्याम् (Chalana-Kalanabhyam)
Sutras 10. यावदूनम् (Yavadunam)
Sutras 11. व्यष्टिसमष्टिः (Vyastisamastih)
Sutras 12. शेषाण्यंकेन चरमेण (Sesanyankena Caramena)
Sutras 13. सोपान्त्यद्वयमन्त्यम् (Sopantyadvayamantyam)
Sutras 14. एकन्यूनेन पूर्वेण (Ekanyunena Purvena)
Sutras 15. गुणितसमुच्चयः (Gunitasamuccayah)
Sutras 16. गुणकसमुच्चयः (Gunakasamuccayah)

Sub sutras 1. आनुरूप्येण (Anurupyena)
Sub sutras 2. शिष्यते शेषसंज्ञः (Sisyate Sesajnah)
Sub sutras 3. आधमाधेनान्त्यमन्त्येन (Adyamadyenant ya-mantyena)
Sub sutras 4. केवलैः सप्तकं गुण्यात् (Kevalaih Saptakam Gunyat)
Sub sutras 5. वेष्टनम् (Vestanam)
Sub sutras 6. यावदूनं तावदूनं (Yavadunam Tavadunam)
Sub sutras 7. यावदूनं तावदूनीकृत्य वर्गं च योजयेत् (Yavadunam Tavadunikrtya Varganca Yojayet)
Sub sutras 8. अन्त्ययोर्दशकेऽपि (Antyayoradaskaepi)
Sub sutras 9. अन्त्ययोरेव (Antyayoreva)
Sub sutras 10. समुच्चयगुणितः (Samuccayagunitha)
Sub sutras 11. लोपनस्थापनाभ्यां (Lopanasthapanabhyam)
Sub sutras 12. विलोकनं (Vilokanam)
Sub sutras 13. गुणितसमुच्चयः समुच्चयगुणितः (Gunitasamuccayah Samuccayagunitah)

So, we can write the multiplication as:

$63 \times 67 = 6 \times (6+1)/3 \times 7$

$= 6 \times 7/3 \times 7$

$= 42/21$

$= 4221$

We can also verify the result using normal mathematical calculations.

This method of multiplication is referred to as the Sutra Ekadhiken Purvena. This method can also be used to multiply two numbers whose last two digits are added up to 100, the last three digits are added up to 1000. Also, in the case of mixed fractions, the sum of proper fractions must be added up to 1 to apply this method of multiplication.

Method 2:
If two numbers are to be multiplied and one of these numbers is having only 9's then we can apply this method.

Example: Multiply 876 and 999.

Solution: Given, two numbers are 876 and 999.

Now, subtract 1 from 876.

$876 - 1 = 875$

Subtract 875 from 999.

$999 - 875 = 124$

Thus,

$876 \times 999 = 876 - 1/999 - 875$

$= 875/124$

$= 875124$

This method of multiplying numbers is Sutra EkanyunenaPurvena.

Similarly, there are many sutras in Vedic maths to perform the multiplication of numbers.

Dr. Arun Kumar Varshney
Professor, Dept. of Mathematics

Eating Junk Food Leads To Obesity

Being fatty:

- What is the reason of growing concern?
- Why are people becoming ill?
- Why are they becoming lazy day by day?

Junk food is also known as fast food. Eating junk food fills up our stomach faster but the amounts of trans fats that are consumed are much higher than regular food. Junk food has more calories than regular food, which leads, of obesity.

- Obesity is a global problem defined by the World Health Organization (WHO) as an abnormal or excessive fat accumulation that can have a negative impact on health.
- Junk food has less nutrition value, often contains high amounts of sugar and fat without providing many mineral, vitamins or nutrients that are essential to good health.
- In order to reduce your risk of obesity, it is essential to reduce your intake of these unhealthy processed foods and try to replace them with fruits vegetables, legumes, whole grains and nuts.
- In addition of this, it is important to exercise if you want to reach or maintain a healthy body. You may loose your weight afterwards and feel generally happy and healthier. You must work off the energy; you have eaten in order to maintain a steady and healthy weight and body.

Dimple
(BCA 2nd Year)