

06/09/18

# First Grade Maths

A) What is the answer in this question?

$$\begin{array}{l} 8 \\ +/- \\ \hline 5 \quad 3 \end{array}$$

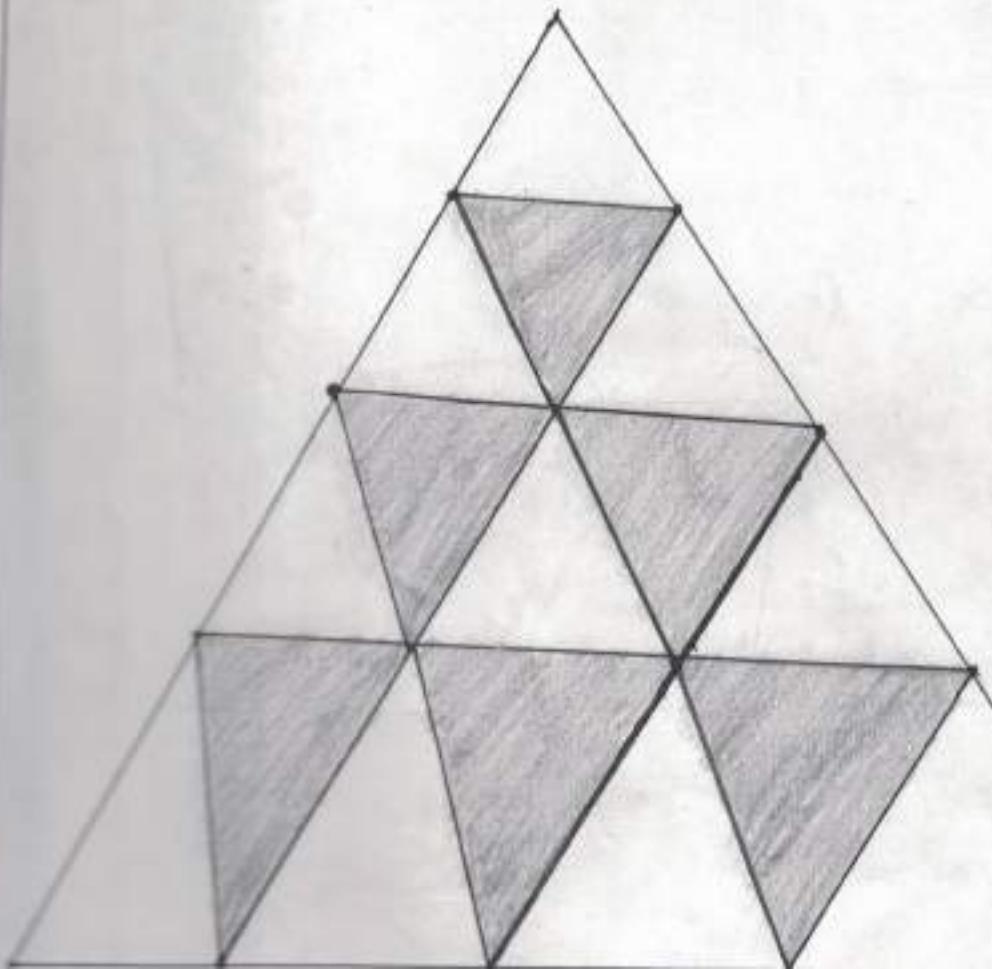
$$\begin{array}{l} 7 \\ +/- \\ \hline 6 \quad 1 \end{array}$$

$$\begin{array}{l} 15 \\ +/- \\ \hline 7 \quad 8 \end{array}$$

$$\begin{array}{l} 16 \\ +/- \\ \hline ? \quad 7 \end{array}$$

$$16 - \square = 7$$

B) How Many Triangles Can You Find?



Ans : 27

K.R.D  
06/09/18  
H.O.D

# FATHERS

Father of Mathematics  $\Rightarrow$  Archimedes

Father of Statistics  $\Rightarrow$  Richard Dawkins

Father of Algebra  $\Rightarrow$  Khwarizmi

Father of geometry  $\Rightarrow$  Euclid

Father of Probability  $\Rightarrow$  Girolamo Cardano

Father of matrix  $\Rightarrow$  Arthur Cayley

Father of calculus  $\Rightarrow$  Gottfried Wilhelm Leibniz

Father of set theory  $\Rightarrow$  George Cantor

Father of analytic geometry  $\Rightarrow$  René Descartes

Father of graph theory  $\Rightarrow$  Leonard Euler

Father of trigonometry  $\Rightarrow$  Hipparchus

Father of fuzzy logic  $\Rightarrow$  Lotfi Aliasker Zadeh

Father of sequence & series  $\Rightarrow$  Carl Friedrich Gauss

Father of coordinate geometry  $\Rightarrow$  René Descartes

By,

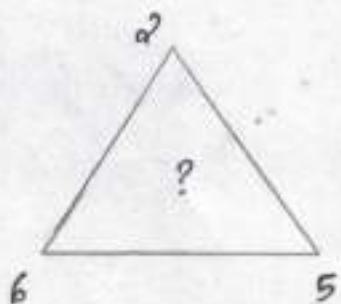
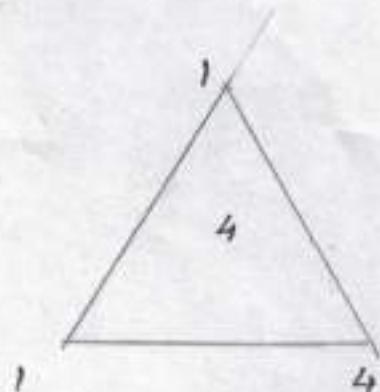
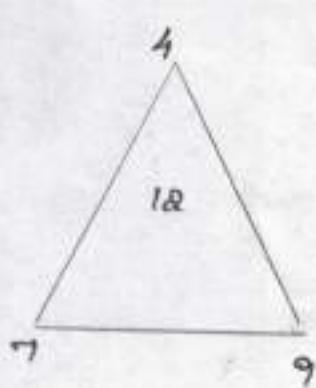
A. Lavanya

I B.Sc (Mathematics)

27/12/18

## Puzzles

Which number replaces the question mark?



(a) 9

(b) 8

(c) 4

(d) 1

Answer :-

9

Explanation:-

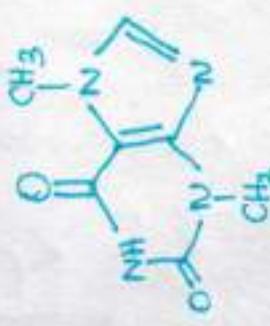
The number at the centre of each triangle equals the sum of the lower two numbers minus the top number.

# CHOCOLATE CHEMISTRY



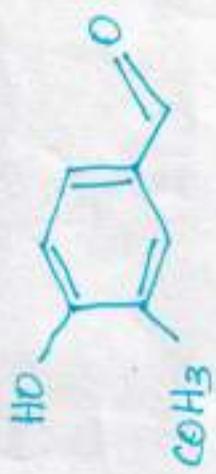
## DARK CHOCOLATE

COCOA SOLIDS: > 35%



## MILK CHOCOLATE

COCOA SOLIDS: 20 - 30%



## WHITE CHOCOLATE

COCOA SOLIDS: 0%



## THEOBROMINE

Dark chocolate has the highest amount of cocoa solids, which remain after the cocoa butter is extracted from beans. The solids contain theobromine, toxic to dogs and methylamine, linked to a foetal effect.

## VANILLIN

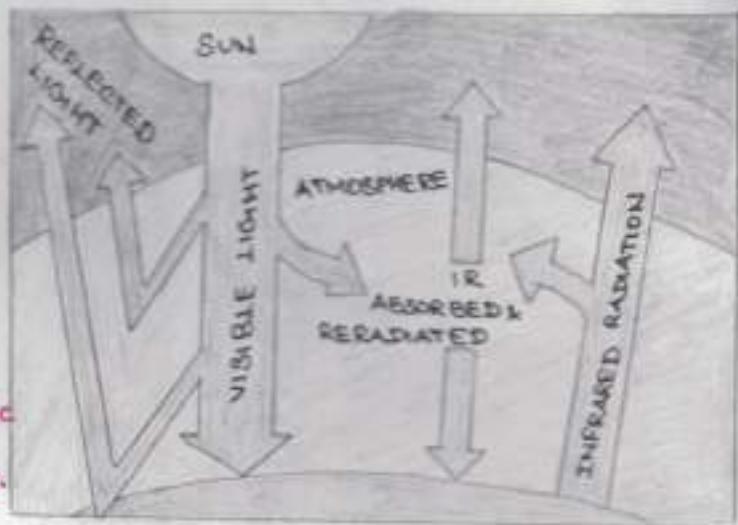
Confectioners add vanillin to many milk chocolates to enhance their flavor. American brands of chocolate often contain butyric acid, which adds a sour note to the chocolate's taste.

White chocolate does not contain any cocoa solids, only cocoa butter, sugar, and milk. Cocoa butter is composed of a number of fats. Mainly stearic acid and palmitic acid.

A. Kavinya  
III - B.Sc CHEMISTRY

# WHAT IS THE GREENHOUSE EFFECT ?

Like a Greenhouse, the atmosphere holds in radiation-light and warmth. Without this greenhouse effect, Earth could not sustain life. So-called greenhouse gases intensify the effect, though, changing the chemistry of atmospheric layers and holding in more heat.



The greenhouse effect allows the short-wave radiation of sunlight to pass through the atmosphere to Earth's surface but makes it difficult for heat in the form of long-wave radiation to escape. This effect blankets the Earth and keeps our planet at a reasonable temperature to support life.

Earth radiates energy, of which about 90 percent is absorbed by atmospheric gases: water vapor,  $\text{CO}_2$ , ozone, methane, nitrous oxide and others. Absorbed energy is radiated back to the surface and warms Earth's lower atmosphere. The gases have come to be called greenhouse gases because they hold in light and heat, just as a greenhouse does for the sake of the plants inside. Greenhouse gases are essential to life, but only at an appropriate balance point. These gases increased during the 20th century due to industrial activity and fossil fuel emissions. For example, the concentration of  $\text{CO}_2$  in the atmosphere has recently been growing by about 1.34 percent annually.

By ,

D P. Jais

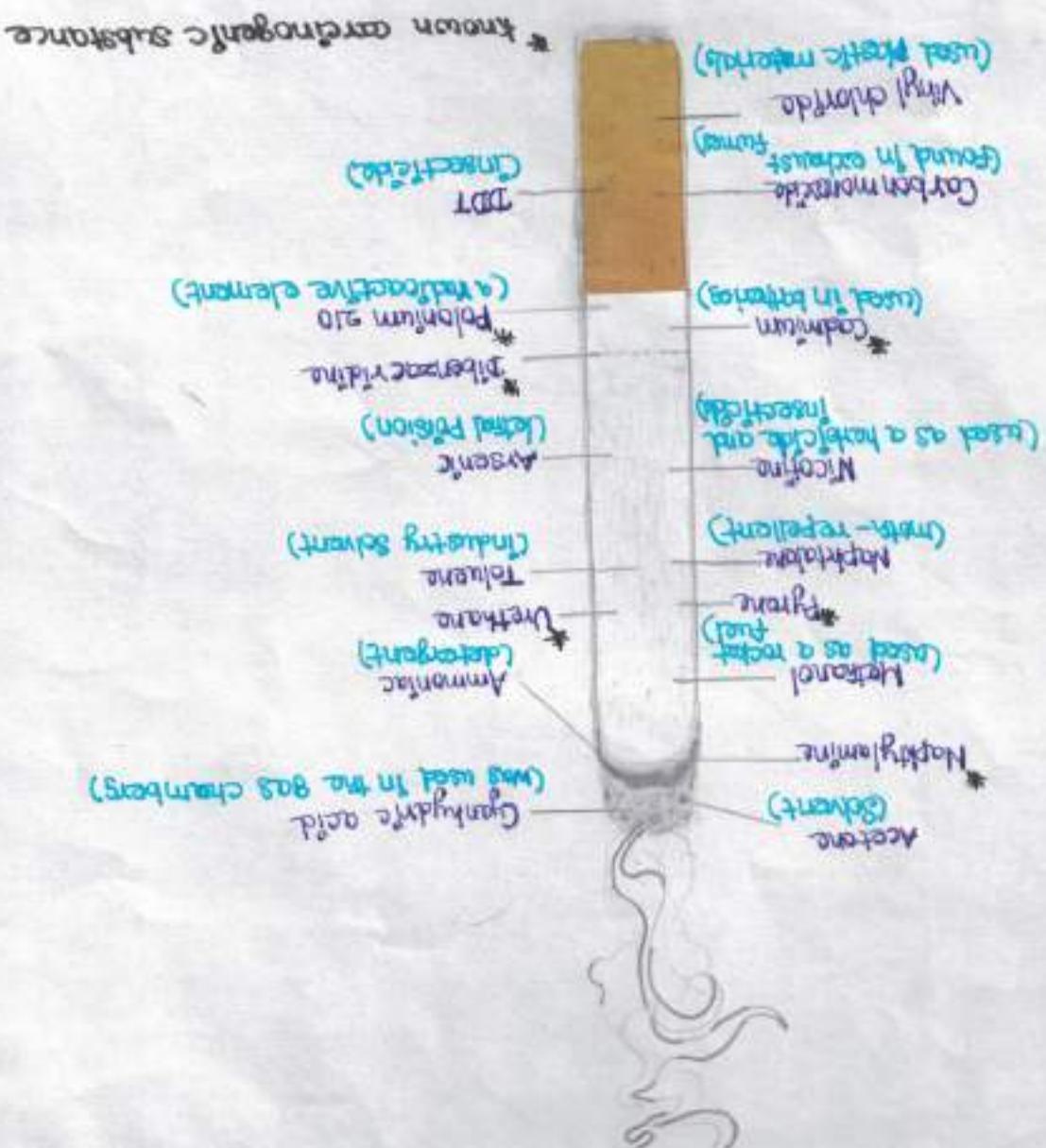
# III-B.Sc chemistry

## A. Diversity

by

There are over 60 compounds in cigarette smoke that cause cancer.

Approximately 50 are known carcinogens (that means they



FEATURES OF JOINT STOCK COMPANIES

- Limited liability
- Separate legal entity
- Transferability of shares
- Separate existence
- Continuous existence
- Capitalistic



**Features of Preference Share**

- Claims on income and assets
- Fixed Dividend
- Cumulative dividend
- Redemption
- Sinking fund
- Call feature
- Participation feature

Issue of Shares

...and the number of shares issued shall not exceed 10% of the total nominal value of the company's share capital or nominal "share premium".  
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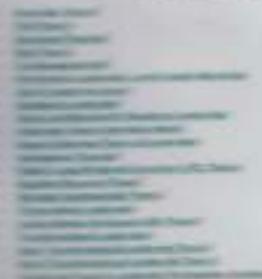
**PROSPECTUS**

INTERNATIONALLY ACCREDITED - GLOBALLY RECOGNISED

"BECAUSE STANDARDS MATTER"



Leadership Theories



## Motivational Thoughts.

- ★ IF you want to achieve greatness stop asking for permission.
- ★ Things work out best for those who make the best of how things work out.
- ★ To live a creative life, we must lose our fear of being wrong.
- ★ If you are not willing to risk the usual you will have to settle for the ordinary.
- ★ Trust because you are willing accept the risk not because it's safe or certain.

by  
K. Mythili  
I-B.COM.

# NATIONAL FOOD WEEKS - 2019

## 1) JANUARY :

- 1) Diet Resolution Week  
(Jan 6 - Jan 12)
- 2) National Folic Acid Awareness Week  
(Jan 6 - Jan 12)
- 3) Healthy Weight Week  
(Jan 20 - Jan 26)
- 4) Salt Awareness Week  
(Jan 24 - Feb 2)

## 2) FEBRUARY :

- 1) National Agricultural Week  
(Feb 3 - Feb 9)
- 2) Pancake Week  
(Feb 10 - Feb 16)
- 3) Eating Disorders Awareness Week  
(Feb 24 - Mar 2)

## 3) MARCH :

- 1) Juvenile Arthritis Awareness Week  
(Mar 3 - Mar 9)
- 2) Save Your Vision Week  
(Mar 3 - Mar 9)
- 3) School Breakfast Week  
(Mar 3 - Mar 9)
- 4) Chocolate Week  
(Mar 10 - Mar 16)

## 4) APRIL :

- 1) Infant Immunization Week  
(Apr 21 - Apr 27)
- 2) World Immunization Week  
(Apr 21 - Apr 27)

## 5. MAY :

- 1) Child Nutrition Employee Appreciation Week  
(Apr 28 - May 4)
- 2) Drinking Water Week  
(May 5 - May 11)
- 3) Food Safety Awareness Week  
(May 5 - May 11)
- 4) Herb Week (May 5 - May 11)
- 5) Kloner's Health Week  
(May 12 - May 18)
- 6) Running and Fitness Week  
(May 19 - May 25)

## 6) JUNE :

- 1) Therapeutic Recreation Week  
(Jul 4 - Jul 13)

## 7) JULY :

- 1) Farmer's Market Week  
(Aug 5 - Aug 11)

## 8) SEPTEMBER :

- 1) Farm Safety and Health Week  
(Sep 9 - Sep 15)

# HEALTH BENEFITS OF FRUITS

- Apples are extremely rich in antioxidants and dietary fibres. And so apples help in reducing cancer, heart disease, hypertension, diabetes.
- Pineapples support Immune system, Bone strength. and reduces the risk of eye disease. It also helps in digestion.
- Mangos plays an protective role in eye health. It also prevent asthma, Cancer, Heart Disease and protect our skin and hair.
- Guavas is rich in Vitamin C. Helps to improve immunity and protects from infection, lowers risk of cancer, keeps heart healthy, improves eyesight and also improves texture.
- Papayas helps in weight loss, Boost immunity, improves digestion, great for eyes.
- Grapes are good source of fiber, vitamins. Help protect against cancer, eye problems, heart disease.
- Pears are rich in Vitamin C, copper, calcium. Helps in good immune systems and may help prevent Cancer.

By Teena Susan Babu  
10/09/2018 2:25:20 PM

# CLOUD COMPUTING

- (\*) Cloud Computing is a technology that uses the internet and central remote servers to maintain data and applications.
- (\*) Cloud Computing allows consumers and Business to use applications without installation and access their personal files at any computer with internet access.
- (\*) This technology allows for much more efficient computing by centralizing storage, memory, processing and bandwidth.
- (\*) "Cloud Computing is the delivery of Computing as a service rather than product where shared resources, software and information are provided to users as an utility (like power grid) over network".

N Jom

# WINDOWS

Microsoft Windows is a group of general graphical operating system families, all of which are developed, marketed, and sold by Microsoft. Each family caters to a certain sector of the computing industry. Active Windows families include Windows NT and Windows Embedded; these may encompass subfamilies e.g. Windows Embedded Compact (Windows CE) or Windows Server. Defunct Windows families include Windows 9x, Windows Mobile and Windows Phone.

Microsoft introduced an operating environment named Windows on November 20, 1985, as a graphical operating systems shell for MS-DOS in response to the growing interest in graphical user interfaces (GUIs).

As of December 2017, the most recent version of Windows for PCs, tablets, smartphones and embedded devices is Windows 10.

By:

# Google CEO- SUNDAR PICHAI

## SUNDAR'S EARLY LIFE:

\* SUNDAR PICHAI was born in Madurai in the state of Tamilnadu on July 12, 1972. His father Raghunath Pichai worked as an Electrical Engineer.

\* His mother Lakshmi a stenographer. At the age of 12 he saw technology in his hands when his father brought a handline phone.

## EDUCATION:

\* He completed his class X from Jawahar Vidyalaya and they lived and class 12th from Vana Vani school at Chennai. He graduated from IIT Kharagpur in Metallurgical Engineering. He completed MS and MBA.

## PRE GOOGLE CAREER:

\* He worked in the IT company

## Career at Google:

- \* He joined Google in 2004 and worked on popular product Google Gears and Google pack before Chrome was launched.
- \* He led product Manager and founded Google Chrome and Chrome OS. In 2008 he was appointed as VP (Vice President) of Google product development.
- \* He introduced chrome browser in 2009.

## Achievements:

- \* Android was added to Google products by Sundar Pichai. Andy Rubin formerly managed Android. Google appointed him as new CEO on August 10, 2015.

N. Dny

## HISTORY:-

\* 1975-1985 The founding of Microsoft childhood friends Paul Allen and Bill Gates sought to make a successful business utilizing their shared skill in computer programming

\* Product line into computer network and the world wide web (www) The company released

\* 2007- 2011 Microsoft Azure, windows vista, windows 7, and Microsoft stores

\* 2011- 2014 windows 8/8.1, xbox one, outlook.com and surface devices

\* 2014- Present windows 10, windows 10 mobile, microsoft edge and hello lens

FOUNDERS :-

- \* Bill Gates , Paul Allen

CEO IN MICROSOFT :-

- \* Satya Nadella

HEAD QUARTERS :-

\* Microsoft Redmond campus

\* Redmond Washington

\* US

\* Hyderabad

PRODUCTS :-

\* Windows

\* Office

\* Servers

\* Skype

\* Visual Studio

\* Dynamics

\* Xbox

\* Surface

ES :-

One Drive

Office 365

Bing

TechNet

AREA SERVED :-

Microsoft Corporation is an American multi  
additional technology company with Area served ... Both  
Office and windows becomes dominant in their respective  
areas

DEVELOPER :-

- \* Microsoft Visual Studio
- \* Windows Dev Center
- \* Developer Network
- \* TechNet
- \* Microsoft Virtual Academy
- \* Microsoft Developers Program
- \* ChannelA
- \* Office Dev Center

Microsoft Employee SALARY :-

5,760 Microsoft Employee salaries

Indian median salary

Software Engineer: 1,127,067

#### MICROSOFT BUSINESS UNITS

- \* Micro soft India (R&D) private limited
- \* Micro soft Research India (MSR) India
- \* Micro soft services global delivery (MSGID)
- \* Micro soft corporation India Pvt. Ltd (MCIPPL)
- \* Microsoft India Global technical support

#### RESOURCES:-

- \* Find out more about how mobile technology can be help address the challenges surrounding employee engagement
- \* Our marketing resource library contains useful documents, e-books, infographics and information that you can view and download

K. Somy  
K. Somy

## Biotechnology Companies in Tamilnadu

1. Life cell International (Erode), (salem), (coimbatore) (Kazui)
2. Green life Biotech Laboratory (Ramachiyam Palayam)
3. Royal Biotech (Pouuvachi)
4. Indian Vaccine and Equipment centre (Namakkal)
5. Sunglow Biotech (coimbatore)
6. centralized Biotechnology Lab (coimbatore)
7. Farmers Bio Fertilizers and organics (coimbatore)
8. House of Aloe (YBL) (Pollachi)
9. Bio AgeS (coimbatore)
10. GISM & CO (Rasipuram)
11. Bagavathi Bio Tech (Erode)
12. Oriental Aquamarine Biotech India (P)Ltd (coimbatore)
13. WiFi Bio Tech India pvt Ltd (salem)
14. GROWMORE Bio-tech LTD (Hosur)
15. Medicardia Bio-Systems (coimbatore)
16. NBK AGRO (Hiranyamangalam) [KARUR]

G. Srinath

## Top 20 Biotechnology Companies in India.

1. Biocon (Bangalore)
2. Serum Institute of India (Pune)
3. Panacea Biotech (New Delhi)
4. Dr. Reddy's Laboratories (Hyderabad)
5. Wockhardt (Mumbai)
6. GlaxoSmithKline Pharmaceutical (Mumbai, Maharashtra)
7. Bharat Serum & Vaccines (Dare Maharashtra)
8. Novozymes (Denmark)
9. Indian Immunologicals Limited (Hyderabad)
10. Shantha Biotechnics (Hyderabad)
11. Syngene International Limited (India)
12. Pfizer (New York)
13. Sun pharmaceutical Industries Ltd (Mumbai)
14. AstraZeneca (Cambridge, England)
15. Aurobindo Pharma (Hyderabad)
16. Kopran (India)
17. IOL Chemicals (India)
18. Parabiotic Drugs Ltd. (India)
19. Caplin point Laboratories Ltd. (India)

# DIABETES MELLITUS

Diabetes mellitus is commonly referred to as diabetes, is a group of metabolic disorders in which there are high blood sugar levels over a prolonged period. Symptoms of high blood sugar include frequent urination, increased thirst and hunger. If left untreated diabetes can cause many complications. Acute complications can include diabetes ketoacidosis, hyperosmolar hyperglycemic state, or death. Serious long term complications include cardiovascular disease, stroke, chronic kidney disease, foot ulcers and damage to the eyes. They have two types.

TYPE - I → Pancreas doesn't produce insulin. This also called Juvenile diabetes. It is affected only for children or teens. This type accounts

TYPE-II → It also doesn't produce enough insulin and cell also unable to use the insulin. Is called insulin resistance. It also called as "adult onset diabetes". It was affected 90% to the age between 45-90.

The Diabetes Mellitus affected by working over time. High sugar levels can lead to kidney disease, heart disease and blindness.

### SYMPTOMS:

- \* Extremely Thirst
- \* Frequent urination
- \* Blurry vision
- \* Extreme hunger
- \* Increased tiredness
- \* Unusual weight loss.

### What Should I do?

See your Doctor and he will perform tests to determine whether or not you have diabetes. If your blood sugar level is high but not high enough is considered as diabetes. This condition is called pre-diabetes. The doctor will make recommendations to bring down your sugar level so you can

## NEWTON'S LAW

In an inertial frame of reference, an object either remains at rest or continues to move at a constant velocity, unless acted upon by a force.

First law



In an inertial frame of reference, the vector sum of the forces  $F$  on an object is equal to the mass  $m$  of that object multiplied by the acceleration ' $a$ ' of the object:  $[F = ma]$  [It is assumed here that the mass  $m$  is constant]  $\therefore$

when one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction on the first body.

By,

D. Gowsalya.

I. B.Sc physics.

KSP

## ALBERT EINSTEIN.

He was German. [14 march 1879- 18 April 1955] was a German born theoretical physicist who developed the theory of relativity, one of the two pillars of modern physics (along side quantum mechanics). His work is also known for its influence on the philosophy of science. He is best known to the general public for his mass-energy equivalence formula  $E=mc^2$ , which has been dubbed "the world's most famous equation".

He received the 1921 Nobel Prize in "physics" for his services to theoretical physics, and especially for his discovery of the law of "photoelectric effect", a pivotal step in the development of quantum theory. He was known for 1. General relativity 2. Special relativity 3. photoelectric effect 4. mass equivalence 5. Planck-Einstein relation 6. Brownian motion 7. Einstein field eqn 8. Bose-Einstein eqn statistics 9. Boson-Einstein condensate 10. Unified field theory 11. EPR paradox 12. Ensemble interpretation and a list of other concepts.

By,

D. Devasalya.

K.S.R

## Why does the sun shines?

Avin. V  
III - B.Sc physics

To a large extent, the sun is made up of hydrogen, which is converted into the element helium inside the sun's atmosphere. In the resultant fusion of two hydrogen atoms with helium, a lot of energy is released. As a result, the core of the sun heats up to an unimaginable temperature, about 8 million °C! On the surface of the sun, the temperature, about 8 million °C! is only around 5500°C. The sun releases this heat energy in the form of radiation, which gives it its fiery glow. About every 11 years, the surface of the sun changes and what we know as sunspots occur. The surface is somewhat cooler and darker around the spots. Thus, they radiate less energy. A few researchers believe that an increase in the occurrence of these spots cause ice ages on the earth.

# Did you know that....

C. Ananthi  
III - B.Sc Physics

- 💡 about 10,000 earthquakes occur every year, of which only a few cause damage?
- 💡 The temperature in the Sahara rises to  $45^{\circ}\text{C}$  during the day, while in the night it drops to just about  $5^{\circ}\text{C}$ ?
- 💡 The footprints of the astronauts can remain on the surface of the moon for a long time because they are not blown over by the wind?
- 💡 The tails of comets is often million of Kilometres long.
- 💡 fuel oil such as diesel must not be released into the ground water? Just 1 litre of fuel oil can make 1 million litres of water unfit for drinking!
- 💡 desert mice never drink water? They 'eat water' on juicy plants.

## Solar System facts.

S. Krishya  
III - B.Sc Physics



- \* Once every 15 years the rings of Saturn seem to disappear. This is because Saturn and the earth's position in such a way that edges of the rings are directly in line with sunlight? The rings shine only when they reflect sunlight.
- \* The great red spot on Jupiter is the oldest known cyclone? It is a giant storm that is known to have existed since at least the 17<sup>th</sup> century when it was first seen.
- \* Venus rotates in a direction opposite to that of Earth? An observer on Venus would watch sunrise in the west and sunset in the east.
- \* A new star is born every 20 days?

S. Krishya

K.S.P

# Leadership Styles

## 1. Autocratic Leadership

Autocratic leadership is an extreme form of transactional leadership, where leaders have absolute power over their workers or team.

## 2. Bureaucratic Leadership

Bureaucratic leadership work by the book. They follow rules rigorously, and ensure that their staff follows procedures precisely.

## 3. Task-oriented Leadership

Highly task-oriented leaders focus only on getting the job done and they can be quite

**Submitted To**

V. Naveen Anand

**Submitted by**

P. Dilakshay

## History of TOM and JERRY...

Tom and Jerry, two of the most honored cartoon characters on motion pictures were created by William Hanna and Joseph Barbera for Metro Goldwyn-Mayer. Their plot centered on a never ending battle, in other case a chase between a housecat and brown mouse. The pair won a total of 7 Oscar awards for Best Animated Short Subject more than any other character. The serial has been named as "The Greatest Television Shows of All Time" in 2006.

While Tom is depicted as bluish-grey housecat, Jerry is shown as small brown mouse living in the same house. Even though Tom is very energetic he is unable to catch Jerry as Jerry is too shorter. But when they are in need of each other they help without any intention. It was the best play liked by the children.

Jesmitha.T.

Submitted to  
V.Nareen Arun

## ENGLISH LITERATURE

-WIKIPEDIA.

This article is focused on English language literature rather than the literature of England, so that it includes writers from Scotland, Wales and the whole of Ireland as well as literature in English from countries of the former British Empire, including the United States. However, until the early 19<sup>th</sup> century, it only deals with literature of United Kingdom and Ireland. It does not include literature written in the other languages of Britain. Old English literature: c. 450-1066 Middle English literature: 1066-1500 English Renaissance: 1500-1660 Restoration Age: 1660-1700 18<sup>th</sup> century, Romanticism 1798-1837 Victorian literature: 1837-1901.

R.S. MAF

- S. SEERIN SINHA

I.B.A ENGLISH

# William Shakespeare

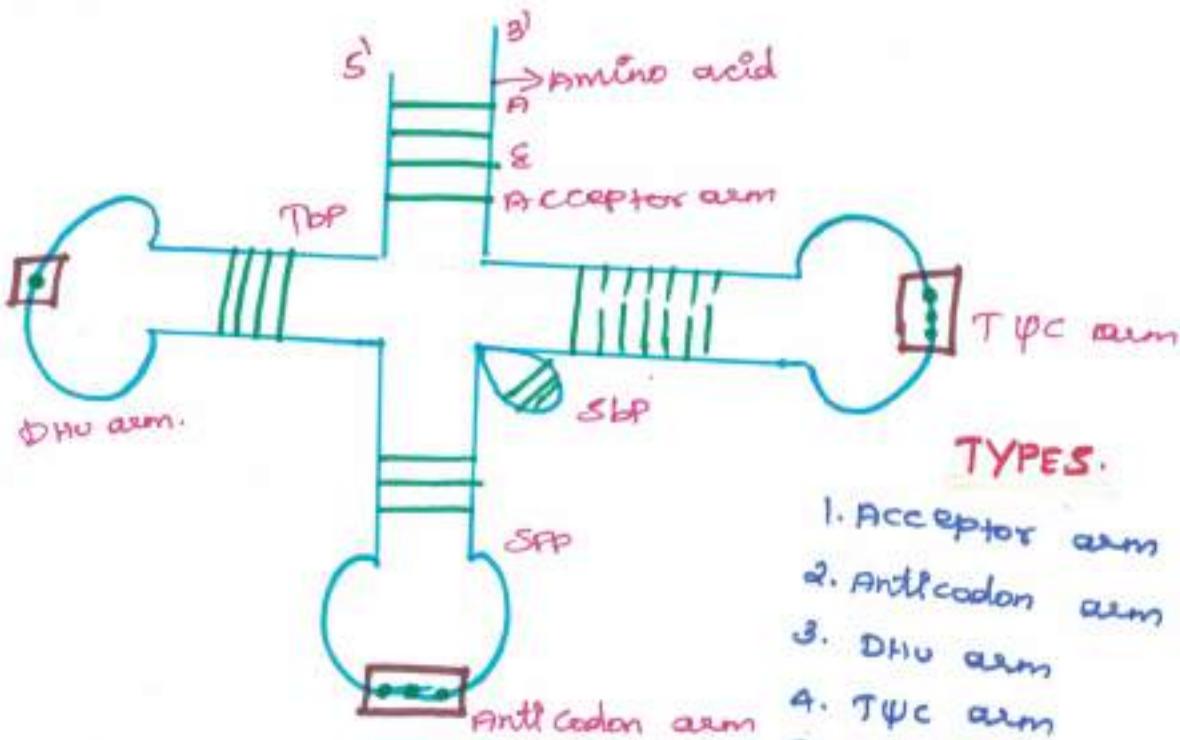
T. Divya  
I BA English literature  
(R.S.M.U)

- \* William Shakespeare was an English playwright, actor and poet also known as the 'Bard of Avon' and often called England's national poet.
- \* Shakespeare born on April 23, 1564 and this is the date scholars acknowledge as William Shakespeare's birthday.
- \* William was the third child of John Shakespeare.
- \* William Shakespeare married Anne Hathaway on November 28, 1582. Their first child, a daughter they named Susanna was born on May 26, 1583. Two years later, on February 2, 1585 twins Hamnet and Judith were born. Hamlet later died of unknown causes at age 11.
- \* Shakespeare Poems Venus and Adonis (1593), The Rape of Lucrece (1594).
- \* Third and shorter narrative poems A Lover's Complaint was printed in the first collection of Shakespeare's sonnets.
- \* Another short Poems The phoenix and the turtle.
- \* There are 152 short sonnets attributed to Shakespeare. Among them the most famous ones are Sonnet 18, Sonnet 71, Sonnet 55.
- \* Shakespeare died in his 52nd birthday April 1616.

Date:

18.9.2018

## t RNA STRUCTURE.



### TYPES.

1. Acceptor arm
2. Anticodon arm
3. D<sub>1</sub>U arm
4. TΨC arm
5. Variable or extra arm.

## t - RNA:-

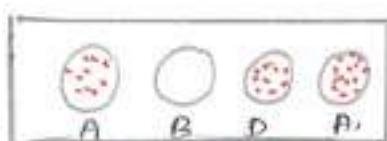
- These are also called as soluble RNA.
- These are the smallest molecules of RNA.
- It carries aminoacid molecules to the site of synthesis.
- It constitutes about 10-20% of the total RNA of the cell.
- The Molecular weight is about 25,000 to 30,000.
- The tRNA consists of 5 different arm which includes,

Date:-

13.10.18

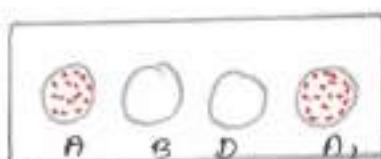
## Blood Grouping.

POSITIVE

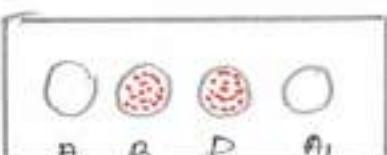


A<sub>1</sub> +ve

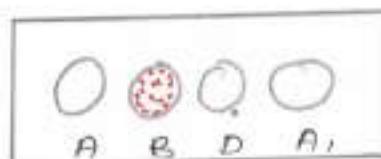
NEGATIVE.



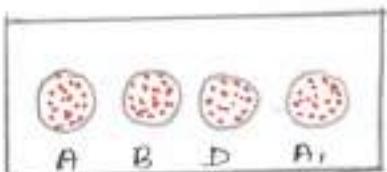
A<sub>1</sub> -ve



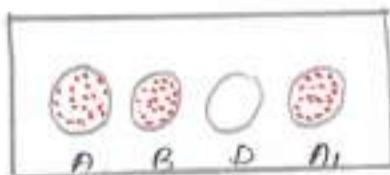
B +ve



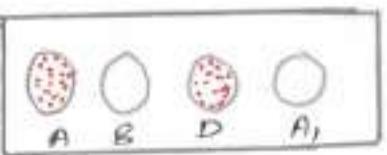
B -ve



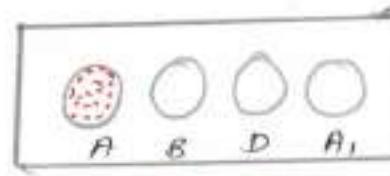
A<sub>1</sub>B +ve



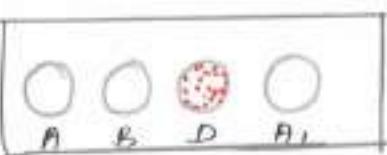
A<sub>1</sub>B -ve



A<sub>2</sub> +ve

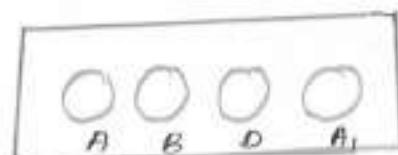


A<sub>2</sub> -ve



O +ve

R. Shy -



O -ve by  
G. Sandhiya.

## Different shapes of nuclei

### Nuclei

14-9-2018

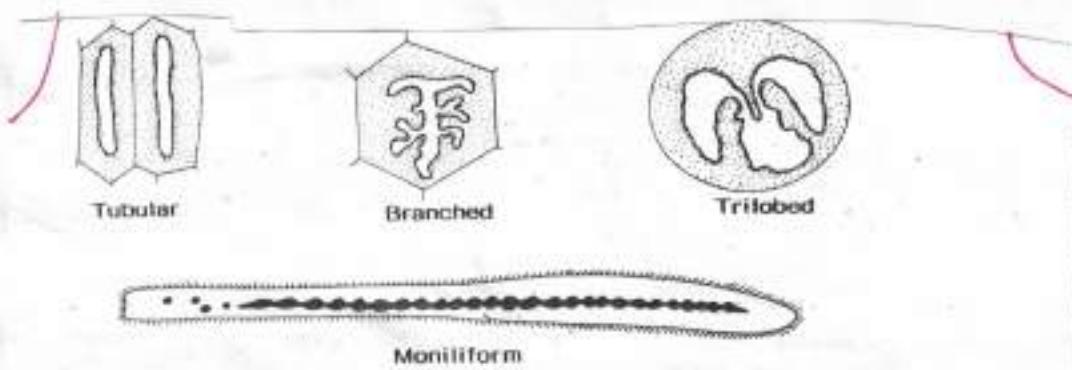


Fig. 21.3: Different shapes of nuclei.

#### Size

The size of the nucleus is not constant. It is variable. The size of the nucleus is directly proportional to the cytoplasm. The more the volume of the cytoplasm; the larger is the size of the nucleus. R. HERTWIG has formulated a relationship between the nuclear volume and the cytoplasmic volume which is called the **nucleocytoplasmic index** (NP). The NP ratio acts as a stimulus to the cell division.

$$NP = \frac{V_n}{V_c - V_n}$$

$V_n$  = Volume of the nucleus  
 $V_c$  = Volume of the cytoplasm

#### shape:

The shape of the nucleus varies considerably. In most of the cells it is spherical in shape. In cylindrical cells it is elliptical. In human neutrophils trilobed. **paramecium** the macro-nucleus is kidney shaped. Spinning gland cells of insects is highly branched. In vorticella it is horse-shoe shaped. In stentor it is beaded.

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