The Forum

A periodical of Burdwan Municipal High School

Volume: 1

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FOREWORD

Boundless becomes my joy to write the foreword for the maiden edition of 'The Forum', a vibrant periodical mouthpiece of literary activity of the teachers and the taught of a prestigious institution like ours. That the students could spare their invaluable time to pen the articles despite their heavy engagement with monthly unit test and home task, is very much encouraging indeed. I must thank my colleagues, but for whose resolve and toil, this English little mag would not have seen the light of the day. I hope one day 'The Forum' will earn great acclaim of the alumni and the general public as well for its effort to encourage the green horns to write.

Dr. Shambhunath Chakrabarti
Headmaster

School events:

The school celebrated her 125th year through a gala three-day programme from 4-6 January, 2008. Many eminent ex-students attended the programme with great enthusiasm. Rajendra Bhaban,

the newly constructed building with a mini auditorium built with financial support from Dr Sadhan Mukherjee, was inaugurated by Shri Nirupam Sen, Hon'ble Minister, and Govt. of West Bengal. The Museum containing portraits of teachers, headmasters, secretaries, eminent students, a rich collection of coins contributed by students and others, many documents and instruments used in the past, was opened to public. The museum got great financial support from Pramatha Adhikari, Amtritendu Adhikari and Bijoli Baran Majumder.

A documentary vcd titled "He Chiranutan", a souvenir and a commemorative volume titled "He Atit ,Katha Kao"were also released in connection with the celebration.

23 August: Four students and three teachers participated in the Nature Study Camp for the members of Eco Club. The camp was held at Kanchannagar on the bank of the Damodar and the organizing agency was Paschim Banga Bigyan Mancha, Burdwan.

Dr. Sambhunath Chakraborty joined our school as Headmaster on July 5,2008.

5 September, 2008: Teachers' Day was observed with appropriate solemnity. The portrait of Dr Sarbapalli Radahkrishnan was garlanded. It was followed by songs and a speech by the Headmaster.

Nirnay Dawn (class ix) and Agnip Karmakar (class ix) participated in a five-day workshop organized by BITM, Kolkata.

Souvav Chatterjee of class VIII won the fourth prize in the essay competition at the state level. The prize included Rs 1000 in cash and a certificate.

Sri Shambhu Hari Pan, teacher in Life Science retired from service on 31.12.2008 after serving this institution for about 26 years. At the farewell meeting students and his colleagues paid tribute to him most cordially. The meeting was held at Rajendra Bhavan.

10.01.2009: Some young teachers who had left the school by resignation were given a formal farewell. The farewell function was held at Rajendra Bhavan.

A seminar was held on the occasion of the 125th birth anniversary of Sir Jagadish Chandra Bose. Students and teachers spoke on the life and woks

of the great scientist. The meeting was held at Rajendra Bhavan.
A documentary film depicting the life and contribution of Sir Jagadish Chandra Bose was screened before students at Rajendra Bhavan .
Students participated in the Science Fair organized by Science Centre, Ramna Bagan,Burdwan and won prizes. They also had their participation with models in the Shishu Utsav 2009 held at Kalpataru Maidan.
Soumik Hati and Anubhab Majumdar participated in the State Science Fair held at Yuva Bhatati Krirangan, Salt Lake Stadium, Kolkata.
The annual games and sports were held on 30th December, 2008. Besides the usual events Go As You Like entertained all.
Sayan Mondal got his paintings published in the Statesman and Anandamela.
26.01.2009: The Republic day was observed on the school ground in the morning. The Headmaster hoisted the tri-colour national flag; the NCC boys saluted the flag to the tune of our national song. Sweets were distributed among those present.
31.01.2009: Saraswati Puja is being celebrated with usual fervour. The event includes the worship and pushpanjali in the morning, the cultural programme in the evening, the art exhibition and the mid-day meal for students and ex-students the next day.
Sri Sunil Kumar Chakraborty, Teacher in Mathematics, retires today after serving the school for more than 14 years.
The following boys represented WB in the National School Basketball Championship (under 14 years) held in January 2009 in Maharastra:

1. Mayukh Choudhury
2. Kaustav Konar
3. Sayan Chatterjee
4. Utsab Das

The following boys represented Burdwan in the State Level Basketball Championship (under 14 years) in October, 2008, held in Kolkata:

1. Jaydeep Roy

The following boy participated in the State School Athletics Competition (under 14 years) held in Durgapur, in January, 2009:
Nurul Islam

Youth State Basketball Championship (under 19 years) held in Durgapur, in January, 2009:
Raj Mukherjee

Types of leaves

Subham Sarkar,

Class VI

We love flowers for their beauty and sweet smell, but the leaves are not less ingesting. They have varieties of shapes and colours of course for practical reasons.

There are two types of leaves

e.g. (a) simple leaf and (b) compound .

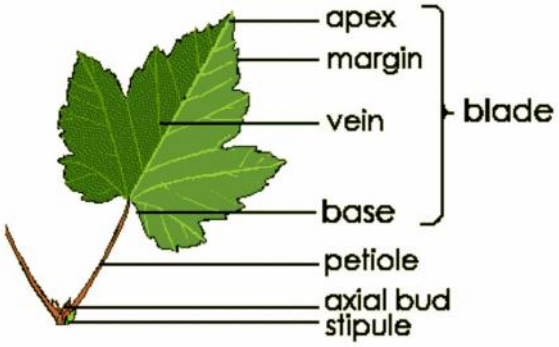
Simple leaf: a leaf is said to be simple when it possesses one articulation and consists of a single leaf –blade. The margin of the leaf-blade may be entire or incised to any to any depth bit the incision near touches the base of the midrib.

Compound leaf: a leaf is said to be compound when it possesses two or more articulations and small segments called leaflets. Viz

- i) pinnate

ii) Palmate.

I) Pinnate: the leaflets are arranged on the rachis like pinnae of bird feather. Pinnatelys compound leaves are of several types.



Volcano

Atri Mallick
Class vii

Vesuvius, Strombli, Krakatoa-do these names sound familiar to you? They are all volcanoes, famous in history.

Well, what are volcanoes? Volcanoes normally originate in the mantle, the crust. The heat inside this layer causes the rocks to melt and produces gas. Geologists today agree that volcanism is a profound process resulting from the thermal evolution of planetary bodies. Heat does not easily escape from large bodies by conduction or radiation.

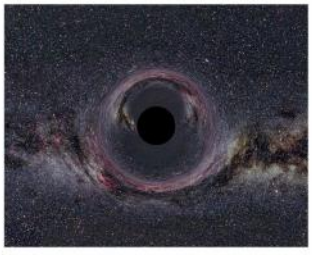
The molten rocks, called magma, mix with gas and become lighter than the surrounding rocks. Magma gradually rises upward making its way through the solid rocks above.

Magma finds its way through weaker rocks and spurts out is known as lava.

Volcanoes are closely associated with tectonic activity. Most of them occur on either the overriding or the diverging margins of the enormous lithospheric plates that make up the earth's surface. The volcanoes that have a constant emission of lava are not likely to emit lava ever again are known as extinct volcanoes. The volcanoes of Japan provide an excellent example of the former, while those of the Mid-Atlantic Ridge the latter. Intra-plate volcanoes such as those of the Hawaiian chain provide important evidence as to the direction and rate of plate motion.

BIZARRE BLACK HOLES

Anubhab Banerjee.
Class – X



Black hole is a region of space having a gravitational force so intense that no matter or radiation can escape from it. Once considered rare and exotic objects, black holes are now known to exist throughout the universe. There also exists the large black hole at the center of our Milky Way galaxy. These black holes accumulate mass by sucking in matter from neighbouring gas, dust and stars. Of late an ultra massive black hole has been discovered by an astronomer of Indian origin, Priyamvada Natarajan and his colleague Ezequiel Treister of Hawaii. These ultra-massive black holes, found at the center of giant elliptical galaxies in huge galaxy dusters, are the biggest in the known universe. They have been found to have masses upwards of one-billon times more than that of sun. Even the large black hole, at the center of our Milky Way galaxy, is thousands of times less massive than these

behemoths. And hearteningly, the discovery also represents the first time an upper mass limit that has been derived for black holes. They seem unable to grow beyond this limit, regardless of where and when they appear. According to the astronomers, it is not just happening today. They shut off at every epoch of the universe.

Text Imput- AYON DAN Class – XI, sec – C

Our School Garden

Arijit Roy
Toufique Ahamed

Today we are slowly losing our green and beautiful nature. But through gardening and planting trees we can save our nature. So we, little students, have made a beautiful garden in our school ground with the help of our teachers. Our teachers not only inspire us but also help us in gardening. We regularly take care of the plants by digging the soil, by giving water and adding fertilizer. The students of each class take part in this activity. We collect some money from each student every month to buy gardening equipment. We also have many big trees, which give us cool shade. We hang placard on the trees on which we write," Don't cut trees" or 'Plant trees and save nature.' So, our garden is not only for beauty but also for the awareness about the value of trees.

Reporting on Nature Study Camp

Sourav Mukhopadhyay & Ahijit Biswas VIII

We, the members of the Green Corps joined a nature study camp at kanchannagar on Saturday 23/8/08 . Many teachers and students from different schools were also there to make it so lively and colourful. Three teachers –Mr. Partha Bandyapadhyay, Mr. Chinmoy Biswas & Mr. Sanjib Chakraborty and three students of us –Sourav Mukhopadhyay , Ahijit Biswas ,Souranshu Choudhury participated in the programme .We were delegated by Burdwan Municipal High School.

The bus of "Jatio Sabuj Bahini" was waiting for us in front of Town Hall. We set out at about 10 am .We arrived at our destination at about 10.30 am .

After our arrival Chandranath Babu laid out a guideline and some important notes about the camp. He told us not to harm any plant or animal of

the area. We were told that a class would be held first . As students of class-VIII we had assumed that a great part of it was known to us. But the more the programme went on, the more we realized that a great part of our life was still left unknown. We realized that mere bookish knowledge is not enough. We had hardly seen many a tree of nature before, but, if we are told to describe them, there will be no dearth of words.

When we found that their characteristics described in the books were the same as found in nature, we were overwhelmed with joy and remembered heartily the comment of the famous educationist :

"Education is the guide of our mind and our mind is a part of nature."

India, in the land of the Moon

Arka Mitra
Class IX

India is in the fray with the USA ,Russia , Japan and China in the field of science or better to say space exploration as Chandrayaan -I , the first ever unmanned spacecraft of India , bound for the moon ,was launched from the second launching pad of the Satish Dhawan Space Centre at 6:20 am on Wednesday, 22nd October ,2008.

The Background: The proposal for sending an unmanned spacecraft to the moon was first tabled in an assembly of Indian Academy of Science in 1999. National Lunar Mission Task Force was formed and after a thorough investigation, the committee gave the seal of approval to the project.

The project received a nod from government in November, 2003.

The Mission: The 386 core worth mission is considered to be the cheapest in the world.

The success in this mission will elevate India to the prestigious league comprising the USA, Japan, Russia and the European Space Agency.

The Project: Chandrayaan-I , the spacecraft is 44.4 metres in height and 1380 kg in weight, consisting of high tech machines, including a terrain mapping camera, a hyper spectral imager, lunar laser, ranging instrument ,high energy x-ray spectrometer and a moon impact probe. Approximately 15 days after its launch from the SHAR Range on PSLV-C11, Chandreyaan –I would be taken into more elliptical orbits by repeated firing of the spacecraft's Liquid Apogee Motor (LAM) at opportune moments. After that the spacecraft will reach the vicinity of the moon tracking a certain route whose apogee lies at 3, 87000 km. Then the speed of Chandrayaan-1 will be slowed by firing of its LAM again to enable the gravitational force of the moon to capture it.

Mottos: To make a three dimensional atlas of the lunar surface.
The impact probe will look for mineral as iron, magnesium, silicon etc., seek uranium and thorium which may solve the fuel crisis of the world.
Chemical mapping of the entire lunar surface is on the list.
It will look for signs of water on the moon.
The quest will be continued for approximately 2 years. ISRO is now planning to send manned spacecraft to moon by 2015 which will definitely increase the reputation of India in this field. Let's hope for the best.

Why Harry Potter is attracting the youngsters?

Arka Mitra
and
Mainak Ghosh
Class – IX

"Harry Potter" the best seller series of J.K.Rowling deals with a young game wizard called Harry Potter. This is completely a magical series of heart-throbbing quests. Within merely ten years of publication it has become perhaps the most popular series in the world. There are several reasons for which the young generation is attracted towards it.

1)The world of fantasy:-

Harry Potter series takes us to a world of fantasy full of wizards, magical creation, spells, wands and lots of magical secrets. These out-of-the-world things naturally fascinate the young mind.

(1) Ordinary soul possessing however extraordinary power:-

Harry is totally a far-from-the-world child who had lost his parents when he was only one. The "Dark Lord" Voldemort tried to kill him also but due to his mother's sacrifice he survived the killing curse "Avada Ke davra" and received some powers of "you-know-who". But, on the other hand, we can see a normal Harry who has immense emotion, rage and also has the problems we often face such as home works, conflict with friends and above all he also enjoys romantic friends as well these similarities so endear him to us.

2) Detailed descriptions:-

J.K.Rowling is an excellent story-teller. She describes the smallest details of Gharry's exploits in her unique style. She collets the ingredients of her story from our daily life. Moreover mysterious, adventures and interplays pf powerful emotions win the hearts of youngsters.

The "Harry Potter" series gives us the message that power of friendship, bravery and love always surpusses evil. This equips us to face and overcome the unforeseen adversities in our life.

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Debi Sarbamangala

Aritra Saha and Arghya Mukherjee
Class X

If the august structure of the Curzon Gate is the unmistakable signature of Burdwan, the icon of this old town is of course Devi Sarbamangala.

The image of Sarbamangala, an incarnation of Mother Durga with eighteen hands in her destructive aspect is carved on a small tablet of black stone, but she occupies a great place in the imagination of the devotees of the town. So she is appropriately housed in a massive Nava Ratna temple (a temple with nine spires) which was built by Kirtichand in the first decade of the 18th century.

Sarbamangala Bari, as it is popularly named, is actually a temple complex, with five other temples in different styles, two Nat Mandirs and a grand Nahabat khana or entrance. The other five temples are dedicated to lord Shiva and house Shiva Lingams with names of their own. They are Kamaleswara, Rameswara and Mitreswara Shivas. The twin temples nearby were built by King Chitrasen.

There is a strange tale associated with the origin of the Sarbamangala image.

The tradition goes that the Chunuries (lime- makers) of Bahir Sarbamangala had got the image in a pond and used it as a block to smash shells on. Once by mistake the image got into the kiln. King Kirtichand had a revelation in his dream that the goddess was there. He sent his men to recover the image and later installed her in the temple.

Devotees visit the temple round the year. Overwhelming crowd is seen on particular auspicious days like Nabavarsha and Jai Mongalbar. There are arrangements for Bhog regularly. The weather-beaten structure of the temple complex has been renovated and remodelled. Mr Biroja Prosad Pal has made great contributions towards it.

The Nahabat khana is being restored meticulously.

Sarbamangala Bari has always been the destination of the devotees of the town, and it will continue to be.

CRICKET

Antik Rej.
Class – V

Cricket – the very name rouses excitement. Cricket also means more than that – when we say 'that is not cricket' we mean that is not fair, because cricket is essentially a gentlemen's game.

Cricket may not be our national game, but is very popular, no doubt. The English first introduced it during the British rule. It is the national game of England. But now it is played in many parts of the globe.

This game is played between two teams at a time and the players are known as the cricketers. Each team consists of eleven players. It is played on a large plot of ground, which must be smooth. Two bats, two sets of three stumps and two pairs of bails and a small leather ball are required. One set of stumps is fixed just opposite to the other. The distance between them is twenty-two yards. The bails are placed on these stumps, which are called wickets. There are two persons present in the field to judge the game. They are the umpires.

The fact which team is going to bat first or field first is decided through a toss. The winning team will get the first choice to choose batting or fielding. The batting team is to come with two batsmen who will stand in front of each set of the wickets. The fielding team will join the field with all of its eleven players. Among them the most agile one is to stand behind one set of the wickets and he is known as wicket keeper. The person who throws the ball to the batsman is the bowler. The rest of the players stand in their positions as directed by their team captain and bowler. After all the arrangements are done, the game begins. The game includes fours, sixes and out. There are a number of different types of outs, run-out, stump-out, catch-out and LBW. The batting continues till the tenth man is out in a given period of fifty overs. Each over consists of six balls. If the overs are completed, though there are remaining batsmen to complete the game, the result of the match is decided according to the scores. The side which scores more than the other team wins the game.

Text Input: AYON DAN. Class – XI, Sec – C

The pretty amazing i-Phone

Arka Dey and Sumanta Bhattacharya, Class X

Apple introduces the i-Phone (3G) with fast 3G wireless technology GPS mapping ,support for enterprise features like Microsoft exchange, and more features at your fingertips and like the original i-phone I combines three products in one_ a revolutionary phone, a widescreen i-pod and a breakthrough Internet device with rich HTML email and desktop class web browser, I-phone (3G). It redefines what a mobile phone can do.

The i-Phone's home screen takes you to I-Phone applications and web clips with a single tap- even when you are on a call, and not two home screens are alike, that is because you can customize with whatever application and web clips you choose. The home screen belongs with some feature icon like phone mail safari, i-Pod SMS, maps I- tune app store, calendar, You-tube photo camera, stocks, calculator, weather notes etc. It is a wonderful instrument that you will definitely dream to possess.

The Mysteries of Big Bang and LHC

Abhirup Mondal & Palash Banerjee
Class X

1.56 p.m. of 10th September 2008. Place: Cern, near Geneva. Two white dots flashed on a computer screen indicating that the world's largest particle collider (LHC) major test by firing a beam of protons around a 27- km underground ring in what scientists hope is the next great step to understand the makeup of the universe. Many will ask: how will it reveal the mystery of the creation of the universe? Before we give you the answer, let us tell you what is Big Bang and LHC.

Journey to the Baby Universe: Most of the scientists (excluding those who have faith in Steady State Theory) believe that the universe was created by a massive explosion which is familiarly called the Big Bang. The concept of Big Bang theorizes that the whole matter and energy of the universe are centrifuged from a singular point of zero volume and infinite density. Thinking people now may begin to question how it is really possible. The answer is: till now no law of physics can explain this singularity. But mathematically it can be measured that a split second (mere 10-43 second) after Big Bang the temperature of the universe was almost 1032k and that primitive universe was nothing but an undifferential soup of matter and radiation. Gradually as the universe expands, it becomes cool and takes the matter dominated

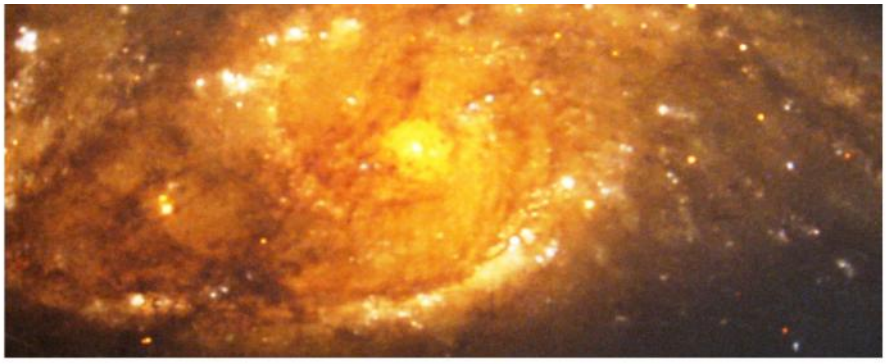

figure of the modern universe.

The Large Hadon Collider is designed to push the two proton beams close to the speed of light –under the influence of Superconducting electro-magnets- whizzing 11000 times a second around the tunnel. Due to their great speed the proton particles (the nuclei of the hydrogen atom, one of a class of particles called hadrons) will acquire the energy of 7 tera-eV. Eventually the two beams – fired in opposite directions and directed by the influence of superconducting electromagnets will collide in a very little space. The collision will produce a massive which is 1lac times greater than the temperature of the core of the sun and recreate the condition, similar to the condition, a fraction of 10-10 second after the Big Bang.

In search of Higgs Boson:

The LHC experiment may reveal more about the unified field theory which is closely related to the theory of the Big Bang. According to the standard model of the Big Bang, there are four types of forces in this universe viz: electromagnetic force, weak force, strong force and Gravitation. The theory also speculates that for a v-e-r-y little time after the Big Bang these forces became inseparable. Through the exchange of W+, W-and Z0 Bosons (weak

force carrier bosons) and photons (electromagnetic force carrier). Weinberg and Aldus Salam proved that weak force and electromagnetic force are non-isolated ones. But here a vital hindrance has yet to be removed. The W+, W-and Z0 Bosons are very heavy while the rest of the mass of photon is zero. If the two forces are produced from the same origin, then why are their force-carrier particles barely distinguishable in the feature of mass? It was first explained by the famous scientist Peter Higgs. He said that the universe emerges in a vast sea of Higgs Boson which is sometimes called the God particle. Most of the particles of the universe have a great affinity to the Higgs Boson and this affinity gives mass to the particles. If Higgs Boson does not exist, the universe will never make up for the lack of mass as well as gravitation. In the Large Hadron Collider the hypothetical particle, Higgs Boson may be originated from the incredible energy of the collision. Otherwise - that means if it is proved that God particle has no existence – the whole standard model of unified field theory as well as Big Bang theory will collapse like a pack of cards. On the contrary the theory of steady state universe which was first introduced by Bondi, Gold and Hoyle will surely gather its power.

In quest of Hidden dimension and Anti-matter:
Albert Einstein – the greatest icon of modern physics showed in his theory of relativity that the universe has four dimensions-space (length, breadth and height) and time (past and future).But the fact that in comparison to the other forces, the gravitation is very much weak and has a hidden and unknown dimension. The hidden dimensions may be shown up at high energy and this will help to develop a quantum theory of gravity. If it happens, the scientists will have a bridge to connect the two theories – the relativity and quantum mechanics.

As a result of Big Bang matter and antimatter had been produced in equal quantity. How has the antimatter been lost then? Has it formed another universe? Hope, LHC will lead us in the right direction.

Light

Sanjib Chakraborty

'Fiat Lux! Let there be light!' ordained God and the Cosmos that had just emerged out of the primordial Chaos, was awash with a resplendent glory. Light is life: it is at the end of the tunnel; it is in the silver lining of a dark cloud and on the wings of the butterfly. It gleams, glows, shimmers and glimmers. It twinkles, sparkles, glitters and blinks. It flashes blazes and beams. It is effulgent and coruscating, scintillating and phosphorescent, illuminating and radiant. "Light the prime work of God to me is extinct", mourned Samson, eyeless in Gaza. "Mech Licht! More light!" Didn't this insatiate longing save Faust from perdition?