

From the Desk of
Principal

Congratulations to staff of Hindu Kanya Collegiate School for bringing out the first edition of this e newsletter. It is an applaudable effort. With the help of it, we are able to disseminate information about the activities held throughout the year. Budding writers of the Collegiate school also get a platform to display their creative talent.

Though, the end of session 2019-2020 was marked by pandemic and teaching-learning changed altogether, we kept on accepting challenges and never let the spirit of moving ahead and growing, die. Hopefully, soon everything will be back on track. We are committed, may be online or offline, to provide our students the best in teaching and facilities.

Wishing good health to all of you.

Dr. Archana Garg
Principal

CORE TEAM OF SCHOOL

Mr. Sanjeev Bhalla, *Academic Incharge*

Mrs. Mamta Bhasin, *Commerce*
Mrs. Geeta Chopra, *Humanities*
Mrs. Renu Soni, *Coordinator, Admissions*
Mrs. Jaspreet Kaur, *Science*

Courses Available
for Study

10+1 & 10+2

Commerce,
Medical

Non Medical &
Arts

(Choice of 13 elective
subjects available in Arts)



this issue

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Budding Writers P.2,3

Snapshots of Activities P.4

An Oasis of True Knowledge



Education today is not restricted to the textbooks and curriculum only.

Technological changes and challenges of society demand education to excel from its traditional approach and hackneyed methods of teaching and learning to fuse the scientific temper and pragmatic outlook. That is why, **Hindu Kanya Collegiate School, Kapurthala**, along with its uniqueness for being the only girls' institution in Kapurthala providing excellent education, promotes young learners to blossom by fostering in them the power of reasoning, rational thinking, social ethics and essential moral values so that they can face any real-life challenges as an enlightened human being. Moreover, unmatched is its student-oriented teaching environment, its safe and hygienic campus, its fully equipped laboratories and its unparalleled state-of-art infrastructure which have been thoughtfully designed to create a dynamic environment which trigger learning and facilitate the teaching process.

In the Session 2019-2020, the school remained thriving with various buzzing activities. Starting from the commencement of the Session, students of four houses: Pragati, Chetna, Jagriti and Kirti maintained 'Information Board' where students provided the rich source of information regarding news headlines, college and school updates, facts and various significant concepts related to knowledge. Students' oratory, performing and presentation skills were further checked through several Inter-House, a Talent Hunt and a HKCian Day Competitions. The main highlight of the session remained its first ever

Mega Fest, 'Super Brainz – 2019', arranged on 21st November 2019, in which 80 short listed students from various schools participated. The winners were awarded with Cash Prizes and trophies. On the same day, a Shabad Gayan Competition was also arranged to mark celebrations of 550th year birth anniversary. In addition to these, on 23rd November 2019, a District Level Science Fest was also organised in the school in which 350 students from different schools displayed their models.

During Summer Vacation, the students of the collegiate school participated in a tree plantation campaign, "Each One, Plant One" by planting saplings in and around their homes. As many as 8 students from our school attended 10-day long Youth Leadership Programme at Manali from 30th September 2019 to 8th October 2019. In the month of October, students were also given fun-filled exposure by taking them on two educational tours to Shri Anandpur Sahib, Ropar and Chandigarh, where they visited Chhatbir zoo, Gurudwara Shri Nabha Sahib, Elante Mal and Sukhna Lake.

The school again became a pioneer in attaching its students with noble projects. It fills me with a sense of pride and gratitude to quote here the sparkling names of our students, Sanjivanie, Palvi Verma, Himani and Tamanna who contributed their valuable services during the session by teaching needy and under-privileged students in Arya Vatsalya Griha Vedic Shram Ashram of Kapurthala, one hour daily in the evening time.

In addition to all these, students of our school brought laurels by achieving grand success in the Board Examination. Out of all 158 successful students, 9 got more than 90% and added another golden page in the success album of our school.

Kudos to all who performed well and those who launched them to soar unmatched heights. Your feedback is solicited, please. Mail us at hkcskapurthala@gmail.com.

Reena Malhi, Editor



Your Sunrise.....

Sometimes, you forget how beautiful you are.
 You forget the way your eyes twinkle when you are happy.
 You forget the way you embody joy and radiate glee.
 You forget how much love you give,
 And how much love you deserve to receive.
 You forget all of that, all the yellow, in exchange of the gray, but I'll say, you are not to be blamed!
 I can't blame you if all you see in the mirror is the gray.
 I can't blame you if you are blind to the yellow.
 And I can't blame you if you believe that you are a monotone block of color and all that you're made of is the gray.
 I just want you to know that the yellow exists.
 It lives in you, it breathes in you, and it thrives in you.
 And you don't need to see it, to know it.
 Just believe in me, I promise, that the yellow is right there in you,
 and one day you'll see it, and when you do, it'll be a bright sunrise in the middle of a desolate night.
 Beautiful. Magnificent. Golden.
 Just look out for your sunrise, its right around the corner.

Sanjivanie Bhalla
 10+1 Arts, 204

How Diamonds can take the Extreme Pressure?



Diamond is considered to be metastable at low pressures. Diamond gets formed at high pressure inside the Earth. When it's brought to the surface, it's at lower pressure. But diamond's structure holds its form firmly. Thanks to the strong chemical bonds that hold its carbon atoms together.
 The study of Diamond have grabbed attention of the astronomers who study distant planets around other stars. Some of these exo-planets may have carbon-rich cores. Studying diamond's quirks at extreme pressures could help reveal these exo-planets' inner workings.
 Diamond is surprisingly good under pressure. Its crystal structure holds up even when compressed to 2 trillion pascals. That's more than five times the pressure in Earth's core.
 The finding is surprising because diamond isn't always carbon's most stable structure. Pure carbon can take on many forms. Diamond is one. Others include graphite (found in pencil lead) and tiny, cylinder shapes called carbon nanotubes. Carbon's atoms are arranged in different ways for each form. Those patterns can be more or less stable under different conditions. Usually, carbon atoms take on the most stable state possible. At normal pressures on Earth's surface, carbon's most stable state is graphite. But given a forceful squeeze, diamond wins out. That's why diamonds form after carbon takes a plunge inside Earth.

Neha, 10+2 Medical , 1103

Physics Nobel Goes to Laser Pioneers



Arthur Ashkin has won half the 2018 Nobel Prize in Physics, while Gérard Mourou and Donna Strickland will split the other half of the prize, for their work on methods to manipulate light. Ashkin, formerly a researcher at Bell Laboratories in Holmdel, New Jersey, developed focused beams of light called optical tweezers to grab and move the minutest elements of matter—from atoms to molecules to living cells. The tool is now used to study the inner workings of cells and DNA.

Tamanna, 10+2 Non-Medical, 1104

A Compromising Rebel in Me



I always feared of compromising,
 Compromising in the world of brutality.
 I spent sleepless nights which often made me cry,
 Am I the next in the largest queue of compromise?
 I ran, ran and ran with a hope of rescue
 But, Tripped over my emotions and values.
 It all started when I questioned the real world of norms,
 Who decides what is right and wrong?



वह चली थी इस आस में
 वह चली थी इस आस में.....
 वह चली थी इस आस में
 की मिटेगी उसकी भूख ,
 पर उसको क्या पता था
 कि मिलेगा उसको जिंदगी का सबसे बड़ा दुख ।

दर- दर भटकी होगी
 खाने के लिए
 पर वह अनजान थी कि
 मनुष्य बैठा है उसे सदा की नींद सुलाने के लिए ।

वह चली थी इस आस में.....
 उसने किया होगा भरोसा इंशानों पर
 निगल बैठी उनके खेत का खाना
 परन्तु उस मां को क्या मालूम था कि उसको महंगा पड़ेगा
 खाया हुआ हर एक दाना ।

वह चली थी इस आस में
 उसे क्या पता था जहर
 वह बन बैठा उसके गर्भ
 में पल रही एक नन्ही सी
 जान के लिए कहर ।

वह चली थी इस आस में
 वह रोई होगी तड़पी होगी
 पर न पहुंचाई उसने किसी को हानि,
 बस भीतर ही भीतर उसे खा रही होगी ,
 अपने की मृत्यु हो जाने की परेशानी।

वह चली थी इस आस में.....
 न देने दिया किसी को खुद को सहारा ,
 उसका कोमल हृदय भरा था
 ममता से बेचारा

वह चली थी इस आस में.....
 न ही किया किसी को तंग
 न ही दर्द में तबाही मचाकर कि
 गांव की शांति भंग ,
 बस इतना किया उसने के
 वह चुपचाप अलविदा कह गई
 अपनी लाल के संग
 वह चली थी इस आस में

Gaganpreet Kaur, 10+2 Arts, 702

Asking for my rights is a rebel
 Keeping quiet rings my weakling bell.
 Should I be telling you more
 Because, its not the end.

Apparently I made a deal with everlasting
 compromise.

And let me tell you it makes me look poised.

Tavleen Kaur, 10+2 Arts 708

The Bacteria in Your Gut May Reveal Your True Age



The billions of bacteria that call your gut home may help regulate everything from your ability to digest food to how your immune system functions. But scientists know very little of how that system, known as the microbiome, changes over time—or even what a “normal” one looks like. Now, researchers studying the gut bacteria of thousands of people around the globe have come to one conclusion: The microbiome is a surprisingly accurate biological clock, able to predict the age of most people within years.

To discover how the microbiome changes over time, longevity researcher Alex Zhavoronkov and colleagues at In Silico Medicine, a Rockville, Maryland–based artificial intelligence startup, examined more than 3600 samples of gut bacteria from 1165 healthy individuals living across the globe. Of the samples, about a third were from people aged 20 to 39, another third were from people aged 40 to 59, and the final third were from people aged 60 to 90.

The scientists then used machine learning to analyze the data. First, they trained their computer program—a deep learning algorithm loosely modeled on how neurons work in the brain—on 95 different species of bacteria from 90% of the samples, along with the ages of the people they had come from. Then, they asked the algorithm to predict the ages of the people who provided the remaining 10%. Their program was able to accurately predict someone’s age within 4 years, they report on the preprint server bioRxiv. Out of the 95 species of bacteria, 39 were found to be most important in predicting age. Zhavoronkov and his colleagues found that some microbes became more abundant as people aged, like *Eubacterium hallii*, which is thought to be important to metabolism in the intestines. Others decreased, like *Bacteroides vulgatus*, which has been linked to ulcerative colitis, a type of inflammation in the digestive tract. Changes in diet, sleep habits, and physical activity likely contribute to these shifts in bacterial species, says co-author Vadim Gladyshev, a Harvard University biologist who studies aging. Zhavoronkov says this “microbiome aging clock” could be used as a baseline to test how fast or slow a person’s gut is aging and whether things like alcohol, antibiotics, probiotics, or diet have any effect on longevity. It could also be used to compare healthy people with those who have certain diseases, like Alzheimer’s, to see whether their microbiomes deviate from the norm.

If the idea is validated, it would join other biomarkers scientists use to predict biological age, including the length of telomeres—the tips of chromosomes implicated in aging—and changes to DNA expression over a person’s lifetime. Combining the new aging clock with these others could yield a much more accurate picture of a person’s true biological age—and health. It could also help researchers better test whether certain interventions—including drugs and other treatments—have any effect on the aging process. “You don’t need to wait until people die to conduct longevity experiments,” Zhavoronkov says. The idea that you can predict someone’s age based on their gut microbiome is “very plausible” and of “tremendous interest” to scientists studying aging, says computer scientist and microbiome researcher Robin Knight, director of the Center for Microbiome Innovation at the University of California, San Diego. His group is analyzing 15,000 samples from the American Gut Project, a worldwide microbiome study he founded, to develop similar age predictors.

But one of the challenges of developing such a clock, he adds, is that there are huge differences in which bacteria are present in the guts of people around the world. “It’s extremely important to replicate these kinds of studies with markedly different populations” to find out whether there are distinct signs of aging in different groups of people, Knight says.

He says it’s also not known whether changes in the microbiome cause people to age more rapidly, or whether the changes are simply a side effect of aging. In Silico Medicine is building several aging clocks based on machine learning that could be combined with the microbiome one. “Age is such an important parameter in all kinds of diseases,” Zhavoronkov says. “Every second we change.”

Amandeep Kaur, 10+2 (Medical), 1001

ਕਿਹੋ ਜਿਹਾ ਆ ਗਿਆ ਜ਼ਮਾਨਾ ਮੇਰੇ ਦੇਸ਼ ਤੋਂ



ਠਹਿਰਾਵ ਵਾਲੇ ਪੰਛੀ ਜਿਵੇਂ ਉੱਡ ਗਏ ਜਹਾਨ ਤੋਂ

ਕਦੇ ਸਬਰ ਸੀ ਹੁੰਦਾ ਮਿੱਟੀ ਦਿਆਂ ਬੁੱਤਾਂ ਚ, ਅੱਜ ਰਿਸ਼ਤੇ ਹੀ ਰੁਲ ਗਏ ਆਪਣੀਆਂ ਚੁੱਪਾਂ ਚ
ਇਨਸਾਨ ਦੀ ਇਨਸਾਨ ਨਾਲ ਅਜੀਬ ਜਿਹੀ ਜੰਗ ਆ, ਖੇਰੇ ਬੇਰੁਖੀ ਹੀ ਨਵੇਂ ਦੌਰ ਦੀ ਮੰਗ ਆ
ਕਦੇ ਮਿਲਦੇ ਸੀ ਲੋਕ ਦਿੱਲੀ ਪ੍ਰੀਤ ਨਾਲ ਹੁਣ ਤਾਂ ਮਿਲਣਾ ਹੀ ਰਹਿ ਗਿਆ ਫੇਨਾਂ ਦੀ ਉਡੀਕ ਨਾਲ
ਯਾਰੀਆਂ ਚ ਸੀਰਾ ਇਤਬਾਰ ਵਾਲਾ ਰੰਗ ਪਤਾ ਨਹੀਂ ਕਿੱਥੋਂ ਸਿੱਖਿਆ ਦੁਨੀਆਂ ਨੇ ਫਰੇਬੀ ਵਾਲਾ ਢੰਗ
ਹੁਣ ਕਿਨਾਰਾ ਕਰ ਗਈ ਜਵਾਨੀ ਇਨਕਲਾਬ ਵਾਲੀ ਸੋਚ ਤੋਂ ਕਿਹੋ ਜਿਹਾ ਆ ਗਿਆ ਜ਼ਮਾਨਾ ਮੇਰੇ ਦੇਸ਼ ਤੋਂ

Anjali . 10+2 (Arts), 707



ਅੰਗ੍ਰੇਜੀ ਬੋਲਨੇ ਕਾ ਮਤਲਬ ਹਿੰਦੀ ਕੋ ਭੂਲਨਾ ਨਹੀਂ ਹੈ

ਅੰਗ੍ਰੇਜੀ ਭਾਸ਼ਾ ਦੇ ਬੜੇ ਵੱਧਣ ਵਾਲੇ ਚਲਣ ਆਰ
ਹਿੰਦੀ ਕੀ ਅਨਦੇਖੀ ਕੋ ਰੋਕਨੇ ਕੇ
ਲਿਏ ਹਰ ਸਾਲ 14 ਸਿਤੰਬਰ ਕੋ ਟੈਸ਼ਅਰ
ਮੈਂ ਹਿੰਦੀ ਟਿਕਸ ਮਨਾਯਾ ਜਾਤਾ ਹੈਂ
ਆਜਾਦੀ ਮਿਲਨੇ ਕੇ ਦੋ ਸਾਲ ਬਾਦ 14
ਸਿਤੰਬਰ 1949 ਕੋ ਸੰਵਿਧਾਨ ਸਭਾ ਮੈਂ
ਏਕ ਮਤ ਸੇ ਹਿੰਦੀ ਕੋ ਰਾਸ਼ਟ੍ਰਭਾਸ਼ਾ ਭਾਸ਼ਾ
ਘੋਸ਼ਿਤ ਕਿਆ ਗਯਾ ਥਾ ਆਰ ਇਸਕੇ
ਬਾਦ ਸੇ ਹਰ ਸਾਲ 14 ਸਿਤੰਬਰ ਕੋ ਹਿੰਦੀ
ਟਿਕਸ ਕੇ ਰੂਪ ਮੈਂ ਮਨਾਯਾ ਜਾਨੇ ਲਗਾ।

ਕਯਾ ਆਪ ਜਾਨਦੇ ਹੈਂ ਕਿ ਆਜ ਕੇ ਦੌਰ
ਮੈਂ ਖਿੱਸਾ ਕਾ ਦੂਸਰਾ ਨਾਮ ਅੰਗ੍ਰੇਜੀ ਹੋ
ਗਯਾ ਹੈ। ਏਸਾ ਇਲਾਏ ਹੈ ਕਯੌਂਕਿ ਹਰ
ਮਾਤਾ-ਪਿਤਾ ਅਪਨੇ ਬੱਚੌਂ ਕੋ ਅੰਗ੍ਰੇਜੀ
ਮਾਧਯਮ ਸਕੂਲ ਮੈਂ ਪੜ੍ਹਾਨਾ ਚਾਹਦੇ ਹੈਂ
ਅਲੇ ਹੀ ਤੁਹੰ ਹਿੰਦੀ ਨਹੀਂ ਆਤੀ ਹੌਂ..ਫਮ
ਯਹ ਨਹੀਂ ਕਹਦੇ ਕਿ ਅੰਗ੍ਰੇਜੀ ਭਾਸ਼ਾ ਨਹੀਂ
ਸੀਖਨੀ ਚਾਹਿਏ, ਲੇਕਿਨ ਇਸਕਾ
ਮਤਲਬ ਯਹ ਨਹੀਂ ਹੈ ਕਿ ਆਪ ਅਪਨੀ
ਮਾਤ੍ਰਭਾਸ਼ਾ ਕੋ ਹੀ ਬੋਲਨਾ ਛੋਡ ਟੋ।
ਸਿੱਧੇ ਫਮ ਹਿੰਦੁਸਤਾਨੀ ਹੀ ਹੈਂ ਜੋ ਅਪਨੀ
ਭਾਸ਼ਾ ਕਾ ਇਸਤੇਮਾਲ ਕਰਨੇ ਸੇ
ਹਿਵਕਿਚਾਤੇ ਹੈਂ।

ਕਯਾ ਆਪਨੇ ਕਸੀ ਵਿਦੇਸ਼ੋਂ ਮੈਂ ਕਿਸੀ
ਕੋ ਹਿੰਦੀ ਬੋਲਦੇ ਫੁਏ ਸੁਨਾ ਹੈ ਨਹੀਂ ਨ
ਏਸੇ ਮੈਂ ਫਮ ਅੰਗ੍ਰੇਜੀ ਭਾਸ਼ਾ ਕੋ ਇਤਨਾ
ਬੜਾਯਾ ਕਯੌਂ ਟੇ ਰਹੇ ਹੈਂ।

ਹਿੰਦੀ ਵਿਸ਼ਵ ਕੀ ਸਭਸੇ ਸੁੰਦਰ ਏਵੰ ਸਰਲ
ਭਾਸ਼ਾ ਮੈਂ ਸੇ ਏਕ ਹੈ। ਹਿੰਦੀ ਭਾਸ਼ਾ ਕੀ
ਸਹਜਤਾ ਆਰ ਸਰਲਤਾ ਨੇ ਸਭੀ ਕਾ
ਦਿਲ ਜੀਤ ਲਿਆ ਹੈ, ਇਲਾਏ ਵਿਦੇਸ਼ੋਂ
ਸੇ ਭੀ ਛਾਤ੍ਰ ਹਮਾਰੀ ਭਾਸ਼ਾ ਆਰ ਸੰਸਕ੍ਰਿਤਿ
ਕੋ ਸੀਖਨੇ ਕੇ ਲਿਏ ਟਾਕੌਂ ਕੀ
ਟਾਕਾਟ ਮੈਂ ਭਾਰਤ ਆਤੇ ਹੈਂ। ਹਿੰਦੀ ਭਾਸ਼ਾ
ਅਪਨੇ ਆਪ ਮੈਂ ਬੇਹੱਦ ਅਫ਼ੂਨ ਹੈ, ਇਲਾਏ
ਫਮੋਂ ਹਮਾਰੀ ਭਾਸ਼ਾ ਕੋ ਸਮਮਾਨ ਟੇਨਾ
ਚਾਹਿਏ।

"ਹਿੰਦੀ ਹੈਂ ਫਮ ਵਧਨ ਹਿੰਦੁਸਤਾਨ
ਫਮਾਰਾ।"

Jaspreet Kaur, 10+2 Arts, 734

Students' Activities through camera.....



These are glimpses of some of the activities arranged by different units and clubs of Hindu Kanya Collegiate School, through out the year. Students very enthusiastically participated in these competitions. The purpose of arranging such events is to ensure overall development of students.