IN BRIEF

Sahitya Akademi invites entries for Yuva Puraskar

NEW DELHI

The Sahitya Akademi has invited entries for the Yuva Puraskar 2020 award from publishers and young Indian authors in 24 languages. The award comprises a prize of ₹50,000, a plaque and a citation. The last date to apply is August 30. IANS

Google announces doodle contest

NEW DELHI

Students can sketch or paint or use graphic art to create unique entries for Google's Children's Day contest. The winner gets a scholarship worth ₹5 lakh. This year's theme is 'When I grow up, I hope...' PTI

A$AP Rocky says he tried to avoid fight

STOCKHOLM

American rapper A$AP Rocky testified on Thursday at his assault trial in Sweden that he did everything possible to avoid a confrontation with two men he said were persistently following his entourage in Stockholm, but one of those men picked a fight with one of his bodyguards. AP

Thailand set to deliver medical marijuana

BANGKOK

Thailand plans to distribute about 10,000 bottles of cannabis oil next week for hospital patients, a government official said on Thursday, the first official use of medical marijuana since a law legalising it came into effect this year. REUTERS

Indus Valley seals carried meaning like modern coins do, shows study

So far, inscriptions from the ancient civilisation have remained an enigma

SHIV SAHAY SINGH
KOLKATA

A majority of the Indus Valley inscriptions were written logographically (by using word signs) and not by using phonograms (speech sounds units), claims a recent research paper published in *Palgrave Communications*, a Nature group journal.

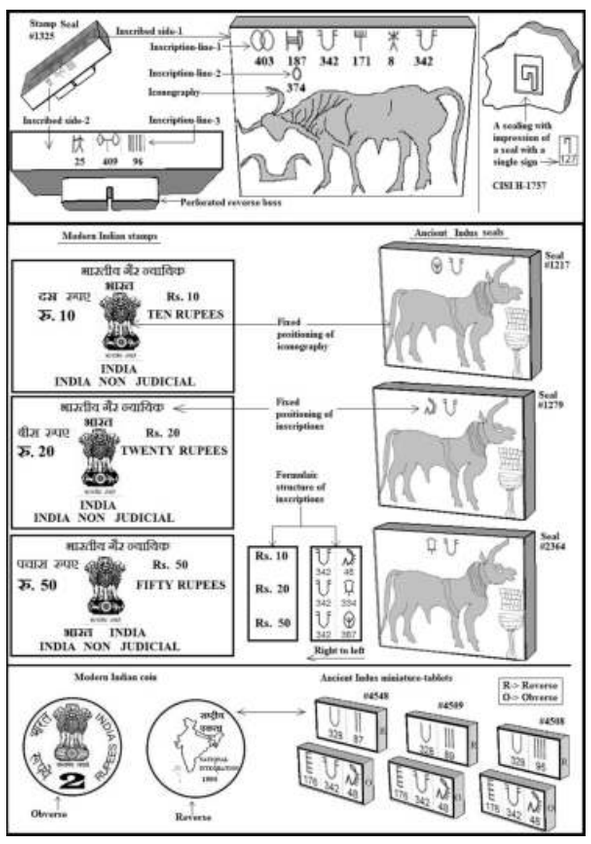
The paper, titled *Interrogating Indus inscription to unravel their mechanism of meaning conveyance*, points out that the inscriptions can be compared to the structured messages found on stamps, coupons, tokens and currency coins of modern times.

Epigraphic analysis

Discovered from nearly 4,000 ancient inscribed objects, including seals, tablets, ivory rods, pottery shards, etc., the Indus inscriptions are one of the most enigmatic legacies of the Indus Valley civilisation which have not been deciphered due to the absence of bilingual texts, extreme brevity of the inscriptions, and ignorance about the language(s) encoded by the Indus script.

"This article mainly focusses on understanding *how* Indus inscriptions conveyed meanings, rather than on deciphering *what* they conveyed," Bahata Ansumali Mukhopadhyay, the author of the paper, told *The Hindu*.

For the study, Ms. Mukhopadhyay has used the digitised corpus of Indus inscriptions compiled by well-known epigraphist and Indus scholar Iravatham Mahadevan. She studied it using computational analyses and various interdisciplinary measures.



Practical use: Structural similarities between some Indus artefacts and modern coins and stamps. ▪ SPECIAL ARRANGEMENT

Analysing the brevity of the inscriptions, the rigid positional preferences maintained by the signs of the inscriptions, and the co-occurrence of restriction patterns demonstrated by certain classes of Indus signs, she infers that such patterns can never be phonological co-occurrence restrictions. Phonological co-occurrence restrictions refers to two or more sound units that cannot be pronounced together. "A very compelling, nearly unassailable proof of the logographic nature of Indus inscriptions comes from the co-occurrence restriction patterns maintained within them," the paper states.

Ancient tokens

In the publication that runs into 37 pages, Ms. Mukhopadhyay classifies the signs into nine functional classes. Based on archaeological evidence, she says, "The inscribed seals and tablets were used in some administrative operation that controlled the commercial transactions prevalent in the trade-savvy settlements of the ancient Indus Valley civilisation. These inscriptions can be compared to the messages found on stamps, coupons, tokens and currency coins of modern times, where we expect formulaic texts that encode certain type of information in some pre-defined ways, rather than freely composed narrative."

A common perception among some scholars is that the Indus script is logo-syllabic, where one symbol can be used as a word sign at one time and as a syllable sign at another. This method, where a word symbol also gets sometimes used only for its sound value, is called the rebus principle. For example, you can combine the pictures of a honey bee and a leaf to signify the word "belief" (bee+leaf). According to Ms. Mukhopadhyay, though many ancient scripts use rebus methods to generate new words, the inscriptions found on the Indus seals and tablets have not used rebus as the mechanism to convey meaning.

The researcher said that the popular hypothesis that the seals were inscribed with Proto-Dravidian or Proto-Indo-European names of the seal-owners does not hold water. It is not that no other Indus scholar has proposed the logographic theory before. Mr. Mahadevan himself tried to read these inscriptions logographically for decades, just that the logographic theory was not articulated well enough. Ms. Mukhopadhyay said her current work could serve as a basis in future for the deciphering of the script.

Edward Snowden's memoir to reveal whistleblower's secrets

Permanent Record will go on sale on September 17

AGENCE FRANCE-PRESSE
WASHINGTON

Edward Snowden, the former National Security Agency contractor who fled to Russia after leaking information about the U.S. government's mass surveillance program, is publishing a memoir.

The book, *Permanent Record*, will go on sale on September 17. It is being published globally by Macmillan Publishers.

Mr. Snowden, who once worked for the CIA in addition to the NSA, has been living in Russia since leaking thousands of classified documents to the press in 2013 which revealed the scope of U.S. government surveillance after 9/11.

Praised as a whistleblower and a privacy advocate by his defenders, the U.S. accuses Snowden of endangering national security.


Edward Snowden

Espionage charges

He is facing espionage charges in the United States that could send him to prison for decades.

"Edward Snowden decided at the age of 29 to give up his entire future for the good of his country," John Sargent, the CEO of Macmillan Publishers USA, said in a statement.

"He displayed enormous courage in doing so, and like him or not, his is an incredible American story," Mr. Sargent said. "There is no doubt that the world is a better and more private place for his actions."

On his Twitter account, Mr. Snowden announced "I wrote a book", and included a link to a video of himself.

"Everything that we do now lasts forever, not because we want to remember but because we're no longer allowed to forget," he says in the video. "Helping to create that system is my greatest regret."

YouTube star killed in paragliding accident

AGENCE FRANCE-PRESSE
LOS ANGELES

YouTube star Grant Thompson, who rose to fame as host of the popular channel "The King of Random", has died in a paragliding accident, his family announced.

Authorities said the 38-year-old, who had 11 million subscribers on his channel and billions of views, was reported missing after he didn't return on Monday from a paragliding trip in Utah.

A GPS device that he had on him was used to locate his body late on Tuesday.

The Washington County Sheriff's office said in a Facebook post that rescuers had recovered paragliding equipment as well as a video recording device that may help shed some light on the crash.


Grant Thompson

Thompson's family informed fans of his death on his social media pages. "Grant's legacy will live on in the channel and the global community he created," the family wrote.

In EU, Google to pause audio transcription

ASSOCIATED PRESS
BERLIN

A German data protection official says Google has given reassurances that it will not make transcripts of speech data picked up by its artificial intelligence system in the European Union for at least the next three months.

Johannes Caspar, who as Hamburg's Commissioner for Data Protection acts as Germany's lead regulator of Google on privacy issues, said on Thursday that he received the assurance after opening proceedings against Google.

He said EU data protection law allows national authorities to take action for a maximum of three months. Google acknowledged last month its contractors are able to listen to recordings of what people tell Google Assistant after some Dutch-language recordings were leaked.

Mr. Caspar urged other authorities to consider action against artificial intelligence systems from rival companies such as Apple and Amazon that also make smart devices.

Japan approves growing human organs in animals for the first time

Modified embryos are implanted with human cells

AGENCE FRANCE-PRESSE
TOKYO

Scientists in Japan will begin trying to grow human organs in animals after receiving government permission for the first study of its kind in the country.

The cutting-edge – but controversial – research involves implanting modified animal embryos with human "induced pluripotent stem" (iPS) cells that can be coaxed into forming the building blocks of any part of the body.

It is the first step in what researchers caution is a very long path towards a future where human organs for transplant could be grown inside animals.

The research led by Hiromitsu Nakauchi, a professor of genetics at Stanford University, is the first of its kind to receive government approval after Japan changed its rules on implanting human cells into animals.

Japan had previously required researchers to terminate animal embryos implanted with human cells after 14 days and prevented the embryos from being placed into animal wombs to develop.

But in March those restrictions were dropped, allowing researchers to seek individual permits for research projects. "It took nearly 10 years, but we are now able to start the experiment," Mr. Nakauchi said.

The research involves generating animal embryos – mice, rats or pigs – that lack a particular organ such as a pancreas.

The modified embryos are then implanted with human iPS cells that can grow into the missing pancreas. The embryos would be transplanted into wombs where they could theoretically be carried to term with a functioning human pancreas.

North Korean champions find memory games full of fun

Techniques are taught right from middle school

AGENCE FRANCE-PRESSE
PYONGYANG

In silence, Pang Un Sim stares down at the jumbled-up playing cards for one minute, slowly shuffling through them.

Putting the pile aside, she takes a second pack and arranges them in order. One by one, the two sets are turned over. They match perfectly.

Behind her stand four trophies and a collection of medals, the North Korean haul from the World Memory Championships in December – the first time the country had entered.

Despite fielding a team of just three contestants, led by Ms. Pang, they collected seven gold medals, seven silvers and five bronze.

"When you are having fun memorising, it is not as hard as people think," 22-year-old Ms. Pang said.

At the championships, Ms. Pang came second overall, her feats including memorising 5,187 binary numbers in order and 1,772 cards in an hour, while her fastest time memorising a pack of playing cards was 17.67 seconds.

Her teammate Ri Song Mi – who came 7th overall – set a world record by recalling 302 words in 15 minutes.

And in the hour numbers event, when competitors have 60 minutes to memorise as many digits as possible, all three North Koreans came in the top five. Two of them beat the previous world record, with Ms. Pang scoring 3,240.


Pang Un Sim arranging a deck of cards. ▪ AFP

Organisers had no idea until the last minute that a North Korean team was entering the contest in Hong Kong.

"They arrived and registered just before registration closed," said the championships' founder Tony Buzan.

"It was like a battering ram of surprises because every one of the ten events featured a North Korean in the top three," Mr. Buzan, who has since died, wrote in the magazine of his Brain Trust charity earlier this year.

"Out of nowhere came this meteorite and shooting star and it was shocking in the most delightful sense."

Every January, North Koreans are required to study leader Kim Jong Un's annual New Year speech extensively, and the team's coach Cha Yong Ho said that memorisation techniques are taught as standard during middle school.

Mr. Cha heads the speed reading research department at the Kim Hyong Jik university of education in Pyongyang, where all three teammates were students – and Pang, whose subject was mathematics, has now joined the faculty.

Many memory competitors use a technique known as the Dominic System that replaces numbers with letters and represents them as images and actions that they connect by making up a story. By re-telling the story to themselves, they decipher the items to be recalled.

"For example, this is an ox and the next one is a bed," Ms. Pang said. "The ox is sleeping on the bed and the bed is wobbly and because an ox is sleeping in the bed instead of a person, the bed breaks in the end. That's the scene I see... I use my imagination."

But the North Koreans have broadened the standard method to bring in other variables, enabling them to memorise faster and remember more, said Mr. Cha.

"We use all the senses for association," he explained. "Feeling, taste, movement, imagination, rhyme and everything you could do in your brain."

Be my friend

Say cheese: Yi Yi, a 19-month-old panda cub during her naming ceremony at the National Zoo in Kuala Lumpur on Thursday. 'Yi Yi' means friendship in Chinese. ▪ AP

Singapore mansion sets record with $167 mn sale

REUTERS
SINGAPORE

A Singapore mansion sitting on a sprawling plot of land has been sold for a record $167 million, the latest in a string of eye-catching property deals in the wealthy city-state.

The home was sold by Winright Investment, whose listed shareholders are tycoon Cheng Wai Keung – chairman of developer Wing Tai Holdings, and his wife, according to business and property records. The 85,000 sq.ft. plot – rare in land-starved Singapore – is near the glitzy Orchard Road shopping belt and the UNESCO-listed Botanic Gardens.

The sale has set a record for a Singapore home in terms of the total transacted price, said Christine Li, head of Singapore and Southeast Asia research at property services firm Cushman and Wakefield.

The deal comes close on the heels of British inventor James Dyson's recent purchase of Singapore's priciest penthouse.

Big Bang: Kolhapur-born scientist wins global honour

Atish Dabholkar to lead the Abdus Salam International Centre for Theoretical Physics in Italy

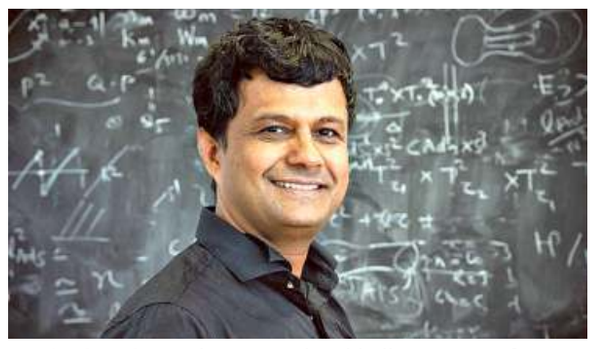
ALOK DESHPANDE
MUMBAI

Atish Dabholkar, a theoretical physicist from India, has been appointed as the new director of Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy.

He is currently the head of ICTP's high energy, cosmology and astroparticle physics section. He joined the centre in 2014 on secondment from Sorbonne Université and the National Centre for Scientific Research, where he has been a research director.

Mr. Dabholkar will take up his duties as ICTP director with the rank of Assistant Director General of the United Nations Educational, Scientific and Cultural Organization (UNESCO). He will succeed Fernando Quevedo, who has led the centre since 2009.

"It's an honour and a great responsibility to be chosen as ICTP's next director. ICTP is a one-of-a-kind institution with a very high level of research and a unique global mission for international cooperation through science. It was envisioned as an international hub for excellence in science and as an anchor to build scientific capacity and a culture of science around the globe. This vision remains valid today even after five decades, but needs to be implemented keeping in mind changing realities and priorities," he said in a statement.



Earning laurels: Until 2010, Atish Dabholkar was a professor at Tata Institute of Fundamental Research in Mumbai.

Born in 1963, Mr. Dabholkar completed his school education at Gargoti in Kolhapur district. He is a graduate of the Indian Institute of Technology - Kanpur.

He earned a Ph.D in theoretical physics from Princeton University, followed by postdoctoral and research positions at Rutgers University, Harvard University and California Institute of Technology. Until 2010, he was a professor of theoretical physics at the Tata Institute of Fundamental Research in Mumbai, and has been a visiting professor at Stanford University and a visiting scientist at CERN.

Mr. Dabholkar is well-known for his research on string theory and quantum black holes. "Research at these new frontiers is an ongoing quest for a more complete and unified formulation of the laws of nature," he said.