

**V**ENOM is a poisonous fluid secreted by certain animals and is injected into prey or aggressors by biting or stinging. These fluids are a cocktail of toxins, mostly proteina-cious is nature. Luckily the part of the world we live in does not harbour a broad diversity of venomous creatures. Certainly bees, wasps and ants can produce venomous sting or bite but are rarely fatal and thus do not provoke alarm. But the one we are about to discuss here is the one which is literally the synonym to the word venom in India — the snakes.

This venom is produced in small sacs called venom glands present in the posterior part of their upper jaw. When a snake is excited or feels threatened, it lets lose this venom which travels from the gland to the fangs via venom ducts. Fangs are actually just the enlarged teeth. A typical fang is hollow from inside, through which venom runs out when an injection is made. Venom that enters in human body generally acts in four ways.

■ **Neurotoxins:** This type of venom attacks the nervous system and is the most lethal form of venom as it acts very rapidly. People may die in less than an hour of bite.

■ **Myotoxins:** This type of venom acts on our muscle cells by digesting them often leading to heart and kidney failure.

■ **Haemotoxins:** Such venom acts on blood cells. This type of venom may form blood clots inside the body leading to heart failure. Also they may have a reciprocal action where they may cause the blood clotting mechanism to fail which leads to severe bleeding and haemorrhage.

■ **Cytotoxins:** Such venom eats away the cells and tissues at the site of bite which goes on extending with the spread of venom. This type of venom results in necrosis, often leading to amputation of organs.

Globally, there is no accurate data on the number of occurrence of snake bite, envenomation or even death resulting from snake bite. Studies sug-



## Fang facts

gest that the degree of envenomation and death globally per year may be as high as 8.1 million and 94,000 respectively, with most cases being in South Asia, Southeast Asia and sub-Saharan Africa. India being an agrarian society, workers are regularly exposed to the hazards of snake bite as their work demands that they visit snake-infested areas.

The World Health Organization regards snake bite as a neglected tropical disease. No well organized management and treatment procedure exists in the Indian subcontinent. The mode of treatment mostly practised is the traditional healing method which results in considerable delay to facilitate proper medication. Even most health giving centres in the country are unprepared to deal with a snake bite case. The only available antidote is the polyvalent snake antivenom (PSA) which is not always guaranteed to deliver the desired result. The PSA is a cocktail of an-

tivenom made to deal with the envenomation mainly caused by the four species of snakes often termed the 'Big Four', namely, spectacled cobra (*Naja naja*), common krait (*Bungarus caeruleus*), Russell's viper (*Daboia russelii*) and saw-scaled viper (*Echis carinatus*). The PSA has also been shown to cause anaphylaxis.

The venom composition of a snake varies according to prey species and geography. The northeastern part of India is unique in terms of its biogeography so also are its snake inhabitants. It too has its fair share of venomous snakes. Unfortunately, this field of science is wanting in this region where almost no study is done on snake venom composition.

In Assam most of the snakes we encounter are non-venomous. Generally speaking, we need to watch out for the snakes with hood (cobra, king

cobra), snakes with yellow and black stripes running across the body length (kraits) and green snakes with broad heads (green pit vipers).

Care to be taken to reduce snake bite incidences

■ House should be kept clear of hiding places of snakes. Snakes generally tend to move towards human settlements in search of

food. Thus, it is important to keep the house free of rodents as they are one of the important food for snakes. Livestock should not be kept inside the house as they encourage the visit of snakes.

■ Avoid sleeping on the floor and use mosquito nets while sleeping.

■ Avoid walking barefoot at night. Use torches and other sources of illumination while going out after dark.

■ Avoid contact with snakes, even a dead snake.

■ Ideally farmers should wear boots but practically it is not possible. Thus, while working in the field, carelessness is the key. Snakes generally avoid places where people gather and take refuge in places where hay and grasses or such other materials are piled. These piles should be handled with extra caution.

Things to remember during a snake bite

■ Be rational in approach while dealing with a snake bite, be a victim or the rescuer.

■ If possible, try to identify the snake, because if it is venomous the course of treatment will depend on its identity. If the snake inflicting the bite is killed on site, this can be brought to health centre to get an idea on its identity. Nowadays, almost all the mobile phones come with an in-built camera, so a picture of the bite inflicting snake can also serve the purpose.

■ In case of a venomous bite time is of essence, so no time should be wasted in traditional healing practices as they are almost always ineffective in case of venomous bite. The victim should be sent to

hospital as soon as possible.

■ Victim should be made comfortable to reduce stress and tension that lead to quicker spread of venom through the body. Victims should be made immobile as much as possible so as to reduce the spread of venom.

■ Remove tight clothing, shoes, watch or rings because in case of swelling these may act as liability and even aid necrosis. But remember that while doing so the victim should not feel stress and movement of body part of the victim should be restricted as much as possible.

■ Do not give the victim anything to eat or drink as that may aid venom circulation and also present with the risk of choking.

■ Avoid tourniquet as many snakes of the region, mostly the vipers produce a bite which causes local damage. Thus, tourniqueting will restrict the flow of blood along with venom. More venom concentration in a particular area may result in rapid necrosis which may even lead to amputation of that organ.

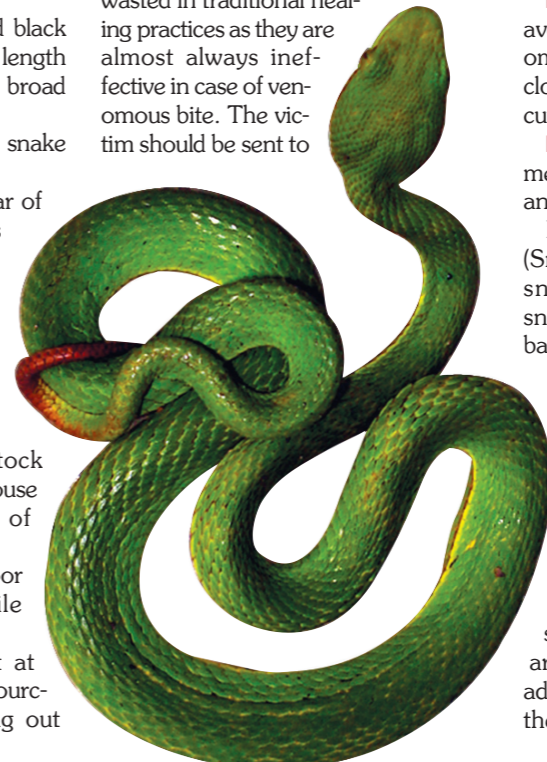
■ Cutting of bite site should be avoided, as many snakes have venom that has the property to fail blood clotting mechanisms. In such cases a cut may aggravate the loss of blood.

■ The most important thing to remember is that, the only antidote of an envenomation is antivenin.

**Pressure immobilization technique** (Snake bite first aid for bite from snake with neurotoxins (elapid snakes, e.g. cobras, kraits): Tie a bandage (if no bandage available, use a strip of cloth) from the bite site

upwards. The wrapping should not be very tight (wrap should be loose enough so that an index finger can be accommodated inside the wrapping). Movement by the victim should be avoided. Limbs should be immobilized by applying a splint on the side and wrapping the bandage around it. Sling should be used in addition to a splint in case of bite to the forelimb.

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## Know the WORD

Devol Nath



**T**AKE a look at the ten words listed below and match the ones in column A with those in column B to see whether you have a great vocabulary.

- |                   |                |
|-------------------|----------------|
| A                 | B              |
| 1. Party-coloured | a) Fasten      |
| 2. Rapine         | b) Careless    |
| 3. Raddled        | c) Motley      |
| 4. Innuendo       | d) Ravaging    |
| 5. Do up          | e) Dependence  |
| 6. Bauble         | f) Inexpedient |
| 7. Slapdash       | g) Insinuation |
| 8. Vassalage      | h) Oppressive  |
| 9. Onerous        | i) Knick-knack |
| 10. Impolitic     | j) Haggard     |

### ANSWERS

- |                   |                 |                   |
|-------------------|-----------------|-------------------|
| 1. Party-coloured | (f) Inexpedient | 10. Impolitic     |
| 2. Rapine         | (h) Oppressive  | 9. Onerous        |
| 3. Raddled        | (e) Dependence  | 8. Vassalage      |
| 4. Innuendo       | (b) Careless    | 7. Slapdash       |
| 5. Do up          | (i) Knick-knack | 6. Bauble         |
| 6. Bauble         | (a) Fasten      | 5. Do up          |
| 7. Slapdash       | (g) Insinuation | 4. Innuendo       |
| 8. Vassalage      | (j) Haggard     | 3. Raddled        |
| 9. Onerous        | (d) Ravaging    | 2. Rapine         |
| 10. Impolitic     | (c) Motley      | 1. Party-coloured |

**Copyright:** Opposite of copyright. Whereas copyright imposes restrictions on the distribution of a work or publication, copyleft eliminates restrictions and allows freedom of use for all.

**SCORES:** All correct: Superior, Eight correct: Good, Six correct: Average

**O**UR attitude towards whatever work we do should be positive and involved. Ethics in attitude and choice means to work sincerely with diligence which automatically produces the best results. Let me narrate a story about a carpenter which is so relevant in this context.

An elderly carpenter was ready to retire. He told his employer contractor of his plan to retire, leave the house building business and live a more leisurely life with his wife, enjoying his extended family. He would miss the regular pay cheque, but he needed to retire. The contractor was sorry to see his good worker go and asked if he could build just one more house as a personal favour.

The carpenter said yes, but in time of actual execution, it was seen that his heart was not in his work. He resorted to shoddy workmanship and used inferior materials. It was an unfortunate way to end a dedicated career. When the carpenter finished his work, the employer came to inspect the house. He handed the front door key to the carpenter and said: "This is your house... my gift to you!"

The carpenter was shocked, what a

shame, what a shame. If he had only known he was building his own house, he would have done it all differently.

As you sow, so you reap. It is a popular saying. It reflects the attitude of mind. If we do not put the best of our effort, at the end when we realize that we are at the receiving end, it is already late and we cannot go back. With a shock, we realize that we have to live in the house we have built. If we could do it over we do it differently, but we cannot go back. The attitude and choices one makes today, will build the 'house'.

## Attitude plus

Pranab Kumar Barua



our own house. So, build it wisely, you are going to live in it.

So, here are the lessons on attitude!

■ **Doing:** It gives you the feeling of success and happiness.

■ **Improving:** It puts you on the road of self satisfaction.

■ **Excelling:** If you aim for excellence, you achieve it.

■ **Enjoying:** It is the fruit of your good work, efforts.

Life is a continuous process of learning and upgrading your knowledge and skill.

"Why does Harry always follows Tom and Dick?"  
"What do you mean?"  
"I mean why do we say 'Tom, Dick and Harry', but not 'Harry, Dick and Tom' or 'Dick, Tom and Harry'?"  
"Good question. Isn't it interesting that some words or names always follow others?"  
"Yes, they do..."  
"You know, there are sets of two or three words used like this. We can call them 'binomials' and 'trinomials' respectively."  
"Binomials and trinomials...?"  
"Yes, they are set phrases containing two or three words usually joined by 'and'. Like your 'Tom, Dick and Harry', we have trinomials such as 'tall, dark and handsome', 'man, wife and child', 'mind, body and soul', 'lock, stock and barrel', 'liberty, equality and...'  
"...Fraternity?"  
"Yes, fraternity. Then you have the binomials or set phrases of two words such as 'ladies and gentleman', 'up and down', 'cat and mouse', 'knife and fork', 'now and then', 'back and forth', 'time and tide'..."  
"Oh, there are so many!"  
"Yes, you have many more... why don't you try some?"  
"Well, binomials... 'bag and baggage'?"  
"Right, 'bag and baggage', then?"

"Day and night", "part and parcel", "hard and fast" ...  
"And 'wear and tear', 'pins and needles', 'all and sundry', 'vim and vigour'..."  
"OK... yes."  
"You know, 'vim and vigour' can be a trinomial too — 'vim, vigour and vitality'."  
"Well, doesn't it mean healthy and energetic..."  
"Yes, when you want to mean that somebody if full of energy and enthusiasm then you may use them."  
"I see... Well, by the way, do you know any house for rent in this locality?"  
"Umm... for you?"  
"No, for my cousin... He was told to vacate his house with bag and baggage."  
"It's bag and baggage; not 'with bag and baggage'. And I've heard about his landlord... he's such a miser!"  
"Yes, every Tom, Dick and Harry knows about him..."

## Mind your ENGLISH

Protim Sharma

From Bibhash Dev Nath, Class IX, Modern English School, Rangia:  
1. 'Azure' is a term in English which means 'blue like the sky'.  
2. 'Zombie' is a dead body which is revived and controlled by witchcraft.

**Note:** Readers can contribute anecdotes, funny quotations, puns or word play, and interesting bits of information about the English language to MYE. Send contributions to: 'Mind Your English', *Horizon*, *The Assam Tribune*, Chandmari, Guwahati-781003 or to: protimsharma@rediffmail.com. Contribute via SMS to: 9435055497.

## tape TALK

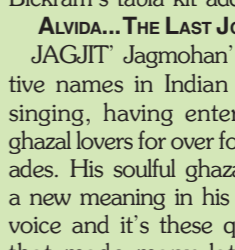
Devajit Chayengia

ELECTRO CLASSICAL, BY BICKRAM GHOSH

TOP percussionist Bickram Ghosh from Bengal comes

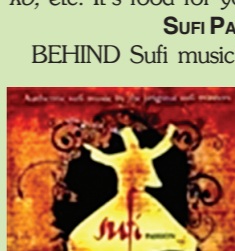


out with his latest offering titled *Electro Classical* which introduces a brand new sound that combines the soulfulness of Indian classical and the excitement of electronica. The album brings in an added electric thrill while retaining the thrilling percussive energy of Bickram's highly successful *Rhythmscape*. *Electro Classical* marks a true fusion of versatility and a bright new sound. While the new age electric avatars of sitar, veena, sarod, mandolin or guitar form the mainstay of the melody, classical vocals, drums and keyboards along with a variety of acoustic instruments, loops and Bickram's tabla kit add to the excitement.



ALVIDA... THE LAST JOURNEY, TRIBUTE TO JAGJIT SINGH

JAGJIT Singh is easily one of the definitive names in Indian ghazal singing, having entertained ghazal lovers for over four decades. His soulful ghazals find a new meaning in his velvety voice and it's these qualities that made many later-day ghazal lovers fall for the genre itself. His demise last year was an immense loss to the Indian music scene and in a fitting reaction the music labels lined up compilation albums to pay tribute to the 'Ghazal King'. This 2-CD, 26-track is one such initiative offering his moody ghazals. The line-up reads like - *Koi fariyaad*, *Bisi aankein nahin dekhin* (with Asha Bhosle), *Dard kaisa bhi ho*, *Inteha aaj ishq ki kardi*, *Jawab jinka nahin*, *Tere baare mein jab socha nahin tha*, *Tere aane ki jab khabar mehke*, *Teri berukhi*, *Yeh jo zindagi ki kitaab hai*, *Aaina saamne rakhoge to yaad*, *Kuchh khona kuchh paana*, *Din dooba tum yaad aaye*, *Mujhe hosh nahin*, *In ashqon ko*, etc. It's food for you soul!



SUFI PASSION, COMPILATION

BEHIND Sufi music's enduring appeal is the genre's melodic attempt to bring the heart closer to God. In this genre, the idiom of romance is used to express one's intense longing for the Almighty. Here the act of singing actually a passionate quest for God and the process transports both the audience and

the singer to a trance-like ecstasy. This exalted state is genuinely attained in case of music by original Sufi masters like Late Nusrat Fateh Saab and Abida Parveen. The following 10 tracks (in 2 CDs) highlights this very element of passion - *Shahbaaz qalandar & Beh haadh ramza dhasdha* - Nusrat Fateh Ali Khan; *Ek nuqta yaar & Sadhe wehre* - Abida Parveen; *Ya Sahib Ul Jamal & Sakal ban phool* - The Sabri Brothers; *Manum khak e sarey & Allah ho ya Rehman* - Rizwan-Muazzam Qawwali; *Mera ishq vee toon & Ghum charkariya ghum* - Pathaney Khan. This one takes you on an ecstatic musical trip!

Courtesy: Planet M